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COMPILED BY

ERNEST BROWNING, M.B.E.

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to which are added

**MEROSTOMATA, PANTOPODA, PENTASTOMIDA, TARDIGRADA,
MYRIAPODA and ONYCHOPHORA**

compiled by

ERNEST BROWNING, M.B.E.

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I.—TITLES

The year of publication is omitted where it is the same as the volume year of the 'Record', namely (1959).

Direction 104. Grant of the status of availability to the names published by C. A. Clerck in 1757 in the work *Aranei specici* and addition of the title of that work to the Official List of Works Approved as available for use in zoological nomenclature. Bull. zool. Nom. 17 : 89-91.

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Enemies & defence.—*Mygalomorpha*, Baerg. (1); Wasp parasites of *Araneus* cocoons, Crome; Pompilid parasites of spiders, Kaston; Predators of eggs of *Latrodectus tredecimguttatus*, Rivasoechi & Bettini; Predators of *Oligonychus coffeeae*, Das; Of *Tetranychus*, Rodriguez; *Piona* sp. recovered from stomachs of *Rana esculenta*, Tyler; *Hunterellus hookeri* parasite of *Ixodes Klyushkina*.

Parasitism, general.—Ecto- and endoparasitism of the Acar., Hughes (1).

Parasitism: Mammalian hosts: Mesostigmata.—*Cosmolaelaps bregetovae* off *Microtus raticeps* and off *Clethrionomys glareolus*; *Laelaspis markewitschi* off *Microtus arvalis*, and off *M. raticeps*, off *Apodemus agrarius*, off *Clethrionomys glareolus*, *Pirianyk*; *Halarachne erratica* in *Pygoscelis papua*, Fain & Mortelmanns (25); *Hirstionyssus hamus* off squirrel, *Lavoipierre* (1); *Hirstionyssus pavlovskii* off *Eutamias sibiricus*, Zemskaya; *Ichoronyssus aristippe* and *I. leucippe* off *Miniopterus schreibersii* bleopatis; *Trombicula dasyploea* off *Hipposideros semoni*; *Trombicula alcithoe* off *Hipposideros bicolor albanicus*, Domrow; *Laelaps brandbergensis* off *Petromyscus collinus*; *L. congoicola* off *Oenomys hypoxanthus*; *L. kampalensis* of *Lemniscomys striatus*; *L. moucheti* off rats; *L. peregrinus* off *Rhabdomys pumilio* and off *Otomys* sp.; *L. praomyiae* off *Praomys tullbergi* and off *Hylomyscus* sp.; *L. tillae* of *Rattus natalensis* & off *Lemniscomys griseida*; *Taeniothrips ornithonyssus pavlovskii* off *Muscardinus avellanarius*, Lange; *Pneumonyssus africanus* from *Cercopithecus mitis*, Fain (6); *Pneumonyssus foxi* in monkey, Sutter; Parasitiformes of rodents in Czechoslovakia, Mrciak & Rosicky (3); *Ancystrupus leleupi* off *Rousettus aegyptiacus*, Benoit (2).

Parasitism: Mammalian hosts: Prostigmata.—*Acomatacarus (A.) wittborei* off *Chlorotalpa stuhlmanni*, Vercammen-Grandjean; *Ascoschongastia meninchi* off *Gliurus japonicus*, Asanuma; *Cheyletiella parasitivorae* off cat, Niggli & Teuscher; *Demodex* off dog, Gaafar et al.; *Demodex* of dog, Kozic & Cricic; *Dolosia guangdongensis* and *Traubacarus brachypus* off *Bandicota nemorivaga*, Liang; *Euschongastia centralkwangtungae* off *Suncus murinus*; *Gahrieptia (P.) puningensis* off rat, Mo et al.; *Euschongastia oblonga* off *Cuniculus paca* and off *Proechimys cayennensis*; *Trombicula tuberculata* off *Myoprocta aouchy*; *T. rotundiculata* off *Cuniculus paca*, Fauran; *Gahrieptia kutsingensis* and *G. sunweiensis* off *Bandicota nemorivaga*, Liang & Hwang (1); *Leptotrombidium* spp off rodents, Vercammen-Grandjean & Taufflieb (4); *Neomyobia radfordi* off *Pipistrellus nanus*, Benoit (1); *Pseudoschongastia aberrans*, P. audyi, *P. hypopis*, *P. scutula* off rodents, Brennan & Jones; *Psorergates emballonurae* of *Emballonura nigricans*; *P. hipposideros* off *Hipposideros abae*; *P. lonchorhinae* off *Lonchorhina aurita* and *Saccopteryx canina*, Fain (10); *Psorergates kerivouiae* off *Kerivoula cuprosa*, off *K. harrisoni bellula*; *P. laviae* off *Lavia frons*; *P. nycteris* off *Nycteris* sp.; *P. rhinolophi* off *Rhinolophus clivosus zuluensis*, off *R. hildebrandti*, also off *R. aethiops*, Fain (7); *Schongastia* spp. off mammals, Vercammen-Grandjean (1); *Traubacarus sinensis* off rats, Liang & Huang (2); *Trombicula (?) feideri* off *Apodemus sylvaticus*, Daniel & Breth (5); *Trombicula gigas* off *Hipposideros armiger*; *Whartonia caobangensis* off *H. armiger*; *W. salina* off *H. fulvus*; *W. prima* off *H. fulvus* and *H. armiger*, Schlinger et al.; *Trombicula japonica* off *Myotis myotis*, Daniel & Dushábk (7); *Trombicula kitaokoi* off *Microtus montebelli*, Asanuma et al. (7); *Trombicula kaohuensis* off *Rattus confucianus*, Yang et al. & (1); *Trombicula odessana* off *Microtus arvalis*, Simonovich; *Trombicula sadoensis* off moles, Saito & Otsuru (1); *Whartonia recurvata* off *Pipistrellus pipistrellus* & off *Hipposideros potensis*; *W. mapaeensis* off *Hipposideros potensis*, Chen & Hsu (1).

Parasitism: Mammalian host: Cryptostigmata.—*Acarus siro tautkei* off *Capra sibirica*, Jakunin; *Alabidocarpus diceratops* off *Rhinolophus capensis*, Lawrence (7); *Chirnyssoides amazonae* off *Hemiderma brevicauda*; *C.*

brasiliensis off *Sturnira lilium*; *C. caparti* off *Artibeus jamaicensis*; *C. venezuelae* off *Tonatia venezuelae*, Fain (15); *Chirnyssus africanus* off *Coleura afra* and *C. gallarum* Fain (20); *Chirnyssus myotis* off *Myotis myotis*, Fain (1); *Chirobia congolensis* off *Rousettus leachi*; *Chirobia squamata* off *Rousettus* sp.; *Teinocoptes astridae* off *Rousettus* sp.; *Teinocoptes eidoloni* off *Eidolon helvum*; *Teinocoptes rousettii* off *Rousettus leachi*, Fain (18); *Chirobia otophaga* off *Epomophorus w. wahlbergi*; *Teinocoptes auricularis* off *Epomophorus w. wahlbergi* and off *Micropteropus pusillus*, Fain (12); *Indochirus ulkalensis* off *Cavia porcellus*, Kanungo & Biswal; *Listrophoroidea squamosa* off *Lepilemur mustelinus* & *Listrophoroidea pauliani* off *Lepilemur ruficaudatus*; *Lemuroptes primarius* off *Galago senegalensis*, Lawrence (3); *Mortelmannia brevis* and *M. longus* off *Saimiri sciurea*, Fain (16); *Myceronyssus polli* off *Hypsignathus monstrosus*, Fain (21); *Mycoptes musculinus* off *Lagurus lagurus* and *Microtus brandtii*, Eble; *Notoedres* spp. from various mammals, Fain (22); *Nycteridocoptes cyndhoveni* off bats, Fain (3); *Opsonyssus zumpti* off *Rhinolophus capensis*; Fain; *Opsonyssus asiaticus* off *Pteropus giganteus*; *O. phyllorhinae* off *Phyllorhina diadema*; *O. brutsaerti* indices off *Eonycteris pelaea* and off *MacroGLOSSUS lagochis*; *Rodhainyssus yunkeri longipilis* off *Molossus asbrus*, Fain (14); *Opsonyssus brutsaerti eidoloni* off *Eidolon helvum*, Fain (19); *Otodectes cynotis* on dog, Frost & Beresford-Jones; *Sarcopeltis pitheci* off *Cercopithecus aethiops sabaeus* and off *Papio p. papio*, Philippe; *Tyroglyphus* in pulmonary cysts in buffalo, Grettillat.

Parasitism: Mammalian hosts: Metastigmata.—*Amblyomma marmoreum* and *A. gemma* off *Diceror brionis* (Rhino.), Cerny (3); *Ixodes arabukiensis* off *Bdeogale crassicauda*; *I. bedolfi* off *Otomys* sp.; *I. minutae* off *Mastomys* coucha; *I. rhabdomysae* off *Rhabdomys pumilio*, Arthur (1); *Ixodes shinchikuensis* off *Canis familiaris*, Sugimoto; *Ixodes tatei* off *Vulpes vulpes*, Arthur; *Ixod.* on rabbits and rodents of Washington, Bacon et al.; *Ixod.* off lower primates, Hoogstraal & Theiler (8); *Ornithodoros solomonis* off fruit bat, Dumbleton; *Rhipicephalus camelopardalis* off *Giraffa camelopardalis tippelskirchi*, Walker & Wiley.

Parasitism: Avian hosts: Mesostigmata.—*Haemolaelaps haydocki* off *Thripias namaquae*; *H. steyni* off *Lybius torquatus*, *H. wilkini* off *Myrmecocichla formicivora*, Till; *Ornithonyssus bursa* off birds, Asanuma; *Ptilonyssus cisticolarum* off *Cisticola fulvicapilla*; *P. estrildicola* off *Lagonosticta rhodopareia*; *P. fringillicola* off *Polioptila striolata kivuensis*; *P. tillae* off *Lamprotonis mevesii*; *Sternostoma cuculorum urostestis* off *Urolophus melanoleucus*, Fain (17); *Rhinonyssidae* from nasal cavities of birds, Grettillat et al. (2); *Sternostoma kelloggi* off catbird (*Dumetella carolinensis*), Hyland & Clark (1); *Sternostoma tracheacolum* in canaries and Gouldian finches (*Peophila gouldiae*), Cumming.

Parasitism: Avian hosts: Prostigmata.—*Boydala psittaci* off *Pionites melanocephala* and *Rhinonyssus sphenisci* off *Spheniscus humboldti*, Fain & Mortelmanns (24); *Boydala tyrannis* off kingbird (*Tyrannus tyrannus*), Ford; *Harpyrhynchus numidiae* off *Numida meleagris*, Lawrence; *Harpyrhynchus pectinifer* off *Campetherab abingoni* (woodpecker); *H. vercammeni* off *Centropus toulou* (coucal); *Neochyletiella faini* off *Cossypha dichroa*; *N. subquadrata* off *Melitophagus pusillus* (bee-eater); *N. transvaalica* off *Melitophagus pusillus*; *Ornithocheyla megaphallos* off *Estrilda erythronotos* (waxbill); *Syringophilus zumpti* off *Streptopelia capicola* (dove), Lawrence (4); *Harpyrhynchus rosellinus* off parakeet (*Psittacula eximius*), Lawrence (5); *Neoschongastia baylii* off *Charadrius dubius curonicus*:

Trombicula blumbergi off *Troglodytes t. fumigatus*, *Asanuma* (2); *Schöngastia* spp. off birds, *Vercammen-Grandjean* (1); *Syringophilus bipectinatus* off poultry, *Hwang*; *Trombicula hazatoi* off *Puffinus leucomelas*, *Asanuma*.

Parasitism: Avian hosts: *Cryptostigmata*.—*Analgesidae*, *Gaud* & *Mouchet*; *Analgesidae* off *Fringilla coelebs*, *Sokolova*; *Analgesidae*, *Vassiliev*; *Brephocelidae* *exquisitus* and *Mesalges piprac* off *Pipra erythrocephala rubrocappilla*; *Pterodectes turdinus* off *Turdus r. rufiventris*; *Trouessartia mangarabensis* off *Turdus a. albicollis*; *Trouessartia serrana* off *Ostionops decumanus maculosus*, *Beria* (1); *Dermoglyphidae*, *Freyanidae* and *Pterolichidae* (part of *Cameroons*), *Gaud* & *Mouchet* (1); *Hemiptero-dectes squalocauda* off *Oxyruncus c. cristatus*, *Beria* (3); *Nemidokoptes pilae* off *Melopsittacus undulatus*, *Benoit* (3); *Nemidokoptes pilae* off *burgerigar*, *Wichmann* & *Vincent*; *Membranolobus camuri* off *Tockus camurus*; *M. fasciati* off *Tockus fasciatus*; *Protolichus laurenti* off *Apagornis pullaria*; *Pseudolallopinus grammophyllus* off *Psittacus erythacus*; *P. odontopus* off *Gypohierax angolensis*; *Pterocolorus aphyllus* off *Ceratogymna atrata* & off *Bycanister albotibialis*; *Pterolichus akidderma* off *Guttera edouardi* sclateri; *P. alloptoides* off *Guttera plumifera*; *P. anacanthus* off *Guttera edouardi* sclateri; *P. cyrtocercus* off *Guttera edouardi* sclateri; *P. diploderma* off *Numida meleagris*; *P. goniodus* off *Guttera plumifera*; *P. hyalosorus* off *Francolinus bicalcaratus*; *P. microthyrus* off *Numida meleagris*; *P. pachydorus* off *Phasianus niger*; *P. coeleosoma* off *Guttera plumifera*; *P. euryzous* off *Guttera edouardi* sclateri; *P. francolinus* off *Francolinus lathami*; *P. glyptothyrus* off *Corythaeaola cristata*; *P. hyalostictus* off *Francolinus squamatus*; *Vexillaria africana* off *Ceratogymna atrata* and off *Bycanistes albotibialis* & *B. sharpei*; *V. intermedia* off *Bycanistes sharpei*; *V. latifolia* off *Bycanistes albotibialis*; *Xoloptoides colpocetus* off *Discosura episocus*, *Gaud* & *Mouchet* (2); *Rhinoderex baezi* and *Stomatodes galagoensis* off *Galago senegalensis moholi*, *Fain* (11); *Trouessartia capensis* off *Zonotrichia capensis* subtriquata; *T. unicolor* off *Haplospiza unicolor*; *T. trunctata* off *Sporophila c. caerulescens*, *Beria*.

Parasitism: Avian hosts: *Metastigmata*.—*Argas persicus* on poultry, *Reid*; *Argas persicus* on turkeys, *Rodriguez* & *Riehl*; *Haemaphysalis ornithophila* off *Pitta o. oatesi* and off *Gallus g. gallus*, *Hoogstraal* & *Kohls* (7).

Parasitism: Reptilian and Amphibian hosts: *Fonsecia anguina* off snake, *F. palmella* off skink, *Brennan* & *Loomis* (1); *Neoschöngastia shihsianensis*, off snake, *Mo et al.*; *Pterygosoma rubicundum* off *Agama armata armata*; *Zonurobra debilis mossambicus* off *Cordylus warreni* *mossambicus*, *Lawrence* (7); *Scutonolaelaps opifidus* off viper, *Lavoipierre* (1); *Schöngastia* spp. off reptiles, *Vercammen-Grandjean* (1); *Hyalomma aegyptium* off tortoises, *Eglin*.

Parasitism.—Invertebrate hosts: *Acarapis woodi* in honeybees, *Bailey* & *Lee*; *Acarapis woodi* in bees, *Benoit*; *Hypoaspis (J.) myriapodalis*, *H. (J.) pararotundatus*, *H. (J.) peritremalis* off *spirostreptid* millepedes, *Ryke* (1); *Laelaptonyssus phytoseioides* off *Hemiptera Baker* & *Johnston*; *Lasiosceius angustus* off millepede (*Phydesmus* sp.); *L. frontalis* and *L. polydesmophilus* off millepede (*Platyrhacus mirandus*), *Evans* & *Sheals* (1); *Myrmonysus phalaenoides* off *Pseudaelatia unipuncta*, *Schröder*; *Riccardoella limacum* on slugs, *White*; *Cetonicola robertsoni* off beetle; *Donnelajontia calostegia* off beetle; *Lavoipierre* (1); *Durenia singaporenensis* off *Aedes curtipes* *Vercammen-Grandjean* (2); *Halizodes chitonis stoutae* off *Sigapatella novae-zelandiae* [Gastrop.],

Stout & *Vieis*; *Arrenurus retrodubius* off *Tramea basilaris* (Libell.), *Münchberg*; *Sperchon* parasitising *Simuliidae*, *Davies* (1); *Hydrach* on *Simuliidae*, *Davies*; *Hydrach* on insects, *Fernando*; *Hydrachna* spp. off *Corixa scotti* (Hemiptera), *Crisp*.

Pentastomida.—From *Canis familiaris*, *Cristi*; *Armillifer armillatus* from chimpanzee, *Alves du Cruz* & *Lino de Souza*; *Linguatula serrata* from cottontail rabbit, *Besch*; *Linguatula serrata* in dog, *Mimoghi* & *Sayin*; *Linguatula serrata* in a bird, *Vaidova* & *Feizullayev*; *Railietiella chamaeleonis* from *Chamaeleo oustaleti* and *C. verrucosus*, *Gretillat* & *Bryoo* (1).

Intermediate hosts.—Parasite-host associations of mites and tapeworms, *Allred*.

Host preference.—Ixod., *Theiler* (2).

Host relationship.—*Trombiculidae* and birds, *Asanuma* (3).

Host lists.—Ixod. of Japan, *Saito*, Y.; *Ixodes rubicundus*, *Stampa*; *Hydrach* larvae, *Sparag*.

Hyperparasitism.—*Ornithodoros erraticus*, *Peinado*.

Phoresy.—*Parasitus coleoptratorum*, *Rapp*.

Parasitism: Plant hosts.—*Acaphylla theae* off tea, *Das* & *Sengupta*; *Acerus fagerina* off *Fagus grandiflora*; *Aculus copallina* off *Rhus copallina*; *Anthonopoda johnstoni* off *Prostanthera lasianthia*; *Cecidophyes lyra* off *Quercus lyra*; *Diptacus fragarifoliae* off *Fragaria virginiana*; *Diptacus rubro* off *Quercus rubra*; *Epitrimerus demissae* off *Prunus demissa*; *Epitrimerus virginiana* off *Prunus virginiana*; *Johnella virginiana* off *Quercus virginiana*; *Johnella chrysolepis* off *Quercus chrysolepis*; *Phyllocoptes sassafras* off *Sassafras officinale*; *Rhynchosaphytopus rubrifoliae* off *Quercus rubra*; *Trisetacus grosmanni* off *Picea sitchensis*, *Keifer*; *Aceria breakeyi* off *Ribes roezlii*; *A. kraftella* and *A. tridentatae* both off *Purshia tridentata*; *Phyllocoptes graniti* off *Amygdalus communis*, *Tetra americana* and *T. nielseni* both off *Ulmus americana*; *Vasates gleditsiae* off *Gleditsia triacanthos*; *V. wagoni* off *Prunus subcordata*, *Keifer* (1); *Acarynchus filamentus* off *Arundinaria gigantea*; *Aceria georgiophila* off *Dianthus* sp.; *Aceria prostantherae* off *Prostanthera lasianthia*; *Aciota costata* off *Tibouchina mutabilis*; *Aculus pelekaesi* off citrus, mandarin and orange; *Ascaracis barbara* off *Prunus lyoni*; *Catarhinus tricholaenae* off *Tricholaena rosea*; *Diptacus swensoni* off *Ilex aquifolium*; *Paraphytopelta arnaudi* off *Cordia parvifolia*; *Tegonotus hassani* off *Olea europaea*, *Keifer* (2); *Aceria* sp. off *litchi* (*Nephelium litchi*), *Alian*; *Aceria ambrosiae* off *Ambrosia psilostachya*; *A. bouvieriae* off *Bowlesia lobata*; *A. brevistetata* off *Purshia glandulosa*; *A. chrysanthmi* off *Chrysanthamus* sp.; *A. cynodonis* off *Cynodon dactylon*; *A. purshiae* off *Purshia glandulosa*; *Eriophyes arida* off *Purshia glandulosa*; *Paraphytopelta artemisiae* off *Artemisia tridentata*, *Wilson*, N. S.; *Brevipalpus australis* off orange, *André*, M. (2); *Bryobia ulicia* off *Ulex europeae* *Endhoven*; *Eotetranychus sexmaculata* off *Poinsettia*, *Pritchard*; *Epitrimerus* sp. off sweet potato, *David*; *Eriophyes phloeopterus* off *Prunus* spp., *Lekić*; *Hemitarsenus latus* off orange, *Calcagnolo*; *Hemitarsenus latus* off cotton, *Channa Basavanna* & *Puttarudriah*; *Oligonychus proteae* off *Proteo incompeta*, *Meyer* & *Ryke* (3); *Oligonychus yusti* off *Camellia*, *McGregor* (1); *Stenotarsonus pallidus* and *Tetranychus telarius* off strawberries, *Stenesteth*; *Tarsonemus bachmaieri* off *Prunus padus*, *Cooreman* (1); *Tarsonemidae* attacking mushrooms, *Moreton*; *Tetranychus telarius* off water hyacinth (*Eichhornia crassipes*), *Cooreman*; *Typhlodromus (T.) contiguus* off citrus and coconut, *Chant* (1); *Xenocaliginellidus ovaerialis* off *Quercus virginiana*, *De-*

Leon; Acar. off cotton, **Rodrigues**; Acar. pests of sugar-cane, **Butani**; Acar. off tea, **Mulrenan**; Acar. injurious to tea, **Minamikawa**; Plant galls of Norway in Zool. Mus. Univ. Bergen, **Leatherdale**.

Technique.—Sampling populations of *Aceria tulipae*, **Staples & Allington**; Extraction of soil arthrop., **Murphy**; Collecting Pseudoscorp. and preparation, **Hoff**; Collecting and sampling methods in limnology, **Albrecht**; Collecting Oribatids, **Balogh** (1); Collecting ectoparasites, **Mohr**; Collecting rodent ectoparasites, **Mosolov**; Collecting methods for Acari, **Müller** (1); Feeding *Haemolaelaps casalis*, **Men**; Feeding *Trombicula akamushi* var. *deliensis*, **Chen & Hsu**; Rearing trombiculids, **Hsu**; Rearing *Trombicula akamushi*, **Neal & Lipovsky**; Cultivation of *Damaeus boreus*, **Sitnikova**; Rearing Oribatids, **Potemkina**; Culture jars for mites, **Huber**; Culture methods, **Lutz et al**; Skin scrapings for *Psorergates* diagnosis, **Gee**.

Transmission of disease.—Acar. vectors, **Hughes** (1); *Dermanyssus gallinae* causing dermatitis, **Schenone** (1); *Tularemia* isolated from *Laelaps hilaris*, **Litvinenko**; *Trombicula scutellaris* vector of scrub typhus, **Asanuma et al** (4); *Rickettsia orientalis* by *Trombicula scutellaris*, **Tamiya**; Mosaic virus by *Aceria tulipae*, **Sill & Rosario**; Toxoplasma by *Amblyomma cajennense*, **Deane**; *Argas brumpti*, **Walton** (2); *Dermacentor marginatus* possible vector of *Brucella bovis*, **Volkova, et al**; *Rickettsia sibiricus* isolated from *Dermacentor nuttalli*, **Korshunova et al**; *Dermacentor pictus* vector of *Brucella abortus bovis*, **Yemchuk & Glushan**; *Dermacentor marginatus* and *Haemaphysalis punctata* carriers of *Coxiella burnetii*, **Gmitter et al**; Virus isolated from *Haemaphysalis*, **Trapido et al**; Sweating sickness by *Hyalomma transsylvanicum*, **Neitz**; Paralysis by *Hyalomma truncatum*, **Swanepoel**; *Rickettsia tsutsugamushi* isolated from *Ixodes* sp., **Juan et al**; *Rhipicephalus simus* vector of typhus, **Timms et al**; *Ixod.* of *Guiana* and *French Antilles*, **Floch & Fauat** (1); Ticks in Indo-Pakistan, **Abdussalam**; Ticks encephalitis, **Igolkin et al**; Acari vectors of haemoparasitoids, **Grebnyuk & Sartbaer** (2); Ticks and brucellosis, **Gudoshnik**; Tick bite and tick pyaemia in lambs, **Foggie**; *Ixod.* as carriers and transmitters, **Galuzo**.

Experimental transmission of disease.—*Amblyomma maculatum* and *Dermacentor andersoni* vectors of Leptospirae, **Burgdorfer**; By *Dermacentor parumapertus*, **Allred et al** (3); Encephalitis and *Ixodes ricinus*, **Benda**; *Ornithodoros coniceps*, **Vermeil et al**; Tick paralysis, **Emmons & McLennan**.

Diseases.—Viruslike transovarian factor affecting spider mites, **Boudreux**; Virus attacking *Panonychus citri*, **Smith et al**; Bacterial flora in *Ixod.*, **Hassan et al** (2).

Hibernation.—*Ixodes ricinus* and *Dermacentor pictus*, **Savitsky**; Sites of Phytoseiidae, **Putman**.

Survival.—*Boophilus microplus*, **Wilkinson & Wilson**; *Ixodes ricinus*, **Černý** (2).

Diapause.—*Tetranychus urticae*, **Bondarenko & K'uang**.

Movement.—*Carpoglyphus lactis*, **Żyromska-Rudzka**; Crawling of *Ixodes persulcatus*, **Balashov** (2).

Behaviour.—Arach., **Savory** (1); *Achaearanea tepidariorum*, **Walcott**; Arrenurid mites, **Mitchell**; Diurnal activity of Hydrach., **Mundie**; *Ixodes rubicundus*, **Stampa**.

Economics.—Acar. and agronomy, **Athias-Henriot** (1); Biological control with Acari, **Fleschner**; Phytoseiidae, **Chant**.

Biological control.—Principles, **Sweetman, H. L.**

Control: excl. Tetranychidae & Ixodoidea.—Scorp., **Minton**; *Latrodectus*, **Volyanskaya**; *Cecidophyes ribis*, **Collingwood**; *Choriptes bovis*, **Sweatman & Pullin**; *Demodex*, **McGregor & Lord**; *Eriophyes gossypii*, **González**; *Eriophyes pyri*, **Fullmer et al**; *Eriophyes ribis*, **Soenen et al** (1); *Eriophyes ribis*, **Takdal**; *Glyciphagus domesticus* in bee hives, **Weide**; *Halotydeus destructor*, **Wallace**; *Knemidokoptes pilae*, **Benoit** (3); *Mycocoptes musculinus* and *Myobia musculi*, **Webb & Shepherd**; *Ornithonyssus sylviarum*, **Rodriguez & Riehl** (1); *Phyllocoptes oleivora*, **Johnson**; *Psorergates ovis*, **Anon**; *Psorergates ovis*, **Graham**; *Psorergates ovis*, **Sinclair**; *Psorergates simplex*, **Flynn**; *Taronomus pallidus*, **Fjeld-dalen & Stenseth**; *Trombicula akamushi*, **Asanuma et al**; *Typhlodromus* and *Acaropsis*, **Strong et al**; *Vasates lycopersici*, **Graniti et al**.

Control: Tetranychidae.—*Brevipalpus australis*, **Ranawera**; *Bryobia praetiosa*, **French**; *Eutetranychus banksi*, **Dean** (1); *Metatetranychus ulmi*, **Collyer & Kirby** (1); *Panonychus citri*, **Riehl et al**; *Panonychus ulmi*, **Fierman**; *Panonychus ulmi* and *Bryobia praetiosa*, **Kurtz & Fullmer**; *Paratetranychus pilosus*, **Hadzistevic**; *Tetranychus cinnabarinus*, **Schuster, M. F.**; *Tetranychus telarius*, **Cavalli**; *Tetranychus telarius*, **Henneberry et al**; *Tetranychus telarius*, **Tardo**; *Tetranychus sexmaculatus* and *Paratetranychus citri*, **Jen & Lai**; *Tetranychus urticae*, **Fritzsche** (1); *Tetranychus* spp., **McKinlay**; *Tetranychidae*, **Attiah**; *Tetranychid.*, **Jeppson**; Spider mites on cotton, **Hassan**, **A. S. et al** (1), (3); Spider mites, **Paik**; Red spider mites, **Taylor et al**.

Control: Ixodoidea.—*Boophilus microplus*, **Corrêa & Gloss**; *Boophilus microplus* and *Dermacentor nitens*, **Huber Luna**; *Dermacentor andersoni*, **Curtis**; *Ixodes persulcatus*, **Mishin** (2); *Ixodes persulcatus*, **Zhukova**; *Ixodes ricinus*, **Černý et al** (5); *Ixodes ricinus*, **Kuznetsov**; *Rhipicephalus sanguineus*, **Hazeltine**; *Rhipicephalus sanguineus*, **Price**; *Ixod.*, **Fiedler & Veldman** (1); *Ixod.*, **Floch & Fauat** (1); *Ixod.*, **Gorchakovskaya & (1)**; *Ixod.*, **Gorchakovskaya & Preobrazhenskaya** (3), (4); *Ixod.*, **Karpov et al**; *Ixod.*, **Mishin** (1); *Ixod.*, **Nabokov et al**; *Ixod.*, **Ribalta et al**; *Ixod.*, **Stampa**; *Ixod.*, **Tarshis & Dunn**; *Ixod.*, **Theiler**.

DISTRIBUTION PALAEARCTIC REGION

Great Britain.—Arach., **Cloudsley-Thompson** (1); Arach., **Whatmough**; Opil., **Opil.**, **Delany**; Opil., **Phillipson & (1)**; Aran., **Lampel**; Aran., **Mackie**; Aran., **Millidge**; Aran., **Parker**; Aran., **Peake**; Aran., **Shaw**; Arac., **Bailey & Lee**; Arac., **Chant** (2); Arac., **Eynhoven**; Arac., **Gifford & (1)**; Arac., **Robert**; Arac., **Leatherdale** (1); Arac., **Niblett**; Arac., **Robertson** (1); Arac., **Thompson & (1)**; Arac., **White**; Hydrach., **Crisp**; Hydrach., **Efford**; Hydrach., **Jones**; *Ixod.*, **Morel**.

France.—Scorp., **Rasmont** (1); Pseudoscorp., Aran., **Acar.**, **Salmon**; Opil., Aran., **Dresco**; Opil., Aran., **Dresco** (1); Aran., **Denis & (4), (5)**; Arac., **André**, **M.** (1); Arac., **Cooreman** (3); Arac., **Karafat**; Arac., **Kreza**; Arac., **Trave & (1)**; Hydrach., **Schwoerbel** (2); *Ixod.*, **Morel & (1), (2)**; *Tardig.*, **Renaud-Debyser** & (1).

Belgium.—Aran., **Denis** (2); Aran., **Kekenbosch & (1), (2)**; Arac., **Fain** (1), (3), (6), (22); *Tardig.*, **Haspelagh**.

Netherlands.—Aran., **Chrysanthus**; Aran., **Chrysanthus et al** (2); Aran., **Hulsebos**; Aran., **Wieber** (1); Hydrach., **Besseling** & (1).

Denmark.—Acar., **Karafat**.

Norway.—Acar., Leatherdale; Acar. Taksdal.

Sweden.—Aran., Holm; Aran., Westman.

Finland.—Aran., Hackman.

Portugal.—Pseudoscorp., Beier (3); Acar., Chant (2).

Spain.—Pseudoscorp., Beier (3); Aran., Dresco (2); Opil., Grasshof (1); Opil., Kraus; Opil., Rambia; Acar., Fernández; Acar., Millán.

Italy.—Pseudoscorp., Beier (4); Aran., Dresco (2); Aran., Giuliani; Aran., Kritscher; Acar., Chant (2); Acar., Cooreman (3); Acari, Fain (22); Acari, Filippini; Acar., Keifer (1); Acar., Pietri-Tonelli; Ixod., Tasselli; Tardig., Ramazzotti.

Switzerland.—Acar., Chant (2); Acar., Cooreman (3).

Austria.—Pseudoscorp., Aran., Acari, Franz et al; Opil., Aran., Acar., Janetschek; Aran., Kepka & (1); Aran., Nemenz; Acar., Klima; Acar., Mihełkō; Acar., Sellnick (1); Ixod., Delic et al; Tardig., Mihełkō.

Hungary.—Aran., Deseö; Acar., Aradi; Acar., Balogh (2); Hydrach., Dudich & Kol; Ixod., Babos; Ixod., Babos & Janisch (1); Ixod., Janisch; Tardig., Iharos; Tardig., Varga.

Yugoslavia.—Aran., Polenec; Acar., Kepka (2); Acar., Mrciak & Tovernik (4); Acari Tarman & (1); Hydrach., Jankovic.

Czechoslovakia.—Scorp., Táboršký; Pseudoscorp., Verner; Opil., Šilhavý; Aran., Lekic; Aran., Miller; Acar., Daniel & (1), (2), (3); Acar., Daniel & Breth (5); Acar., Daniel & Dushabek (6), (7); Acar., Halášková & (1); Acar., Kunst & (1); Hydrach., Láska; Acar., Mrciak & (1); Acar., Mrciak & Rosický (3); Hydrach., Poný; Ixod., Černý; Ixod., Ilie; Ixod., Mačík & Nosek; Ixod., Nosek & (1); Tardig., Węglarska (1).

Germany.—Opil., Kraus (1), (3); Aran., Braun; Aran., Acar., Priesel-Dichti; Acar., Cooreman (1); Acar., Hering; Acar., Karafiat; Acar., Keifer; Acar., Krezal; Acar., Märkel; Acar., Märkel & Meyer (2); Acar., Müller, W.; Acar., Schaarachmidt; Hydrach., Schwoberl; Hydrach., Viets, K. (1), (4); Ixod., Britz.

Poland.—Opil., Souček; Aran., Mikulska; Acar., Dziuba; Acar. Karafiat; Acar., Klimaszewska & Kwiatkowska; Acar., Kozłowski & Zukowski; Hydrach., Pieczyński; Tardig., Węglarska.

Rumania.—Acar., Feider & Solomon (2); Acar., Lange.

Bulgaria.—Acar., Mrciak (2); Acar., Travé; Acar., Vassilev; Acar., Volgin.

Greece.—Opil., Aran., Roewer (1); Acari, Cooreman (4); Acar., Keifer (2).

U.S.S.R.—Opil., Kratochvil; Acar., Boldyrev; Acar., Grebenyuk et al (1); Acar., Hushchuk & (1); Acar., Jakunin; Acar., Kadzhaya; Acar., Kozlova (1); Acar., Nelina et al; Acar., Povelschikova; Acar., Razumova; Acar., Reck; Acar., Savina; Acar., Simonovich; Acar., Słonov (1); Acar., Venkova; Acar., Wainstein (1), (2), (3); Acar., Zemskaya; Acar., Zemskaya & Ilienko (1); Acar., Zhizhishvili; Ixod., Alifanov & Netsky; Ixod., Anastas; Ixod., Arzamasov; Ixod., Babenko & (1); Ixod., Djakonov; Ixod., Galuzo; Ixod., Grebenyuk; Ixod., Grishina et al; Ixod., Grobow; Ixod., Iemchuk; Ixod., Ivanova; Ixod., Jordanija-Rapava; Ixod., Levit & (1), (2); Ixod., Morosov & Shuleik; Ixod., Nelina et al (1); Ixod., Ogandzhanian; Ixod., Ouchakova; Ixod., Pervomaisky; Ixod., Pervomaisky et al (1); Ixod., Piontovskaya & Mishchenko; Ixod., Pospelova-Shtröm & Abusalimov; Ixod., Pospelova-Shtröm & Tagiltzeo (1); Acar., Ratcliffe & Hughes; Ixod., Reznik; Ixod.,

Sarbaev & (1); Ixod., Savitsky; Ixod., Sharipova & (1); Ixod., Slesarenko; Ixod., Słonov; Ixod., Susakova; Hydrach., Yankovskaya.

Azerbaizhan.—Ixod., Abusalimov; Hydrach., Kasmov;.

Lithuanian SSR.—Acar., Eitminavičiūtė.

Siberia.—Ixod., Ghibet & Nikiforov.

Ukraine.—Acar., Chebotarov; Acar., Dmitriyev; Acar., Pirianyk.

Corsica.—Acar., Athias-Henriot (4); Hydrach., Angelier & (1), (2), (3).

Sardinia.—Pseudoscorp., Beier (1); Aran., Grasshoff; Acar., Sellnick.

Sicily.—Aran., Denis (1); Acar., Tardo.

Lampedusa Id.—Aran., Grasshoff.

Crete.—Opil., Aran., Roewer (1).

Cyprus.—Acar., Georgiou; Acar., Keifer (2).

Algeria.—Acar., Athias-Henriot & (1), (3), (4).

Morocco.—Pseudoscorp., Aran., Acari, Strinati & Aellen; Acari, Cooreman (4); Acar., Guillemenet; Acar., Smirnoff; Acar., Vercammen-Grandjean & Taufliib (4).

Tunisia.—Acar., Cuenod; Ixod., Colas-Belcour & Morel.

Egypt.—Acar., Keifer (2); Acar., Hassan A. S. et al; Acar., Willmann; Acar., Yunker et al; Ixod., Hassan et al & (1); Ixod., Hoogstraal & (1); Ixod., Hoogstraal & Kaiser (3); Ixod., Reid.

Central Asia.—Acar., Fain (4).

China.—Acar., Chen & Hsu (1); Acar., Chen et al (2); Acar., Hsu P. K. et al; Acar., Jen; Acar., Mo et al; Acar., Liang; Acar., Liang & Hwang (1), (2); Acar., Lin & Tang; Acar., Tan et al; Acar., Yang et al & (1); Acar., Yu et al; Acar., Yiu & Wu (1); Ixod., Fen; Ixod., Luh & Woo.

Haian Id., China.—Scorp., Takashima (1).

Hong Kong.—Acar., Chant (1).

Korea.—Acar., Whang.

Japan.—Aran., Ishinoda; Aran., Saito, S.; Aran., Uyemura; Aran., Yaginuma & (1); Acar., Aoki & (1), (2); Acar., Asanuma & (1), (2), (3), (4), (5), (6), (7); Acar., Ehara & (1); Acar., Chant (2); Acar., Iwakura & Sasahara; Acar., Kitamura; Acar., Matsuyama; Acar., Minamikawa; Acar., Morikawa; Acar., Nakamura et al; Acar., Nishida & (1); Acar., Obama; Acar., Ohse et al; Acar., Paik; Acar., Saito & Otsuru (1); Acar., Sasa & (1); Acar., Sasa & Shanghai; Acar., Takahashi; Acar., Tamiya et al; Acar., Whang; Acar., Yaita; Acar., Yamaguchi et al; Acari, Yamashita & Konno; Hydrach., Imamura & (1); Ixod., Namba; Ixod., Saito, Y.; Tardig., Hatai.

Loochoo Is.—Acar., Kawashima & Kamo; Acar., Miyazaki et al.

Turkey.—Scorp., Tolunay; Solif, Opil., Aran., Roewer (1); Acar., Düzgüneş; Ixod., Hoogstraal (2).

Lebanon.—Acar., Chant (2).

Israel.—Scorp., Shulov & Amitai & (1); Aran., Shulov & Weissman (2); Acar., Swirski & Amitai.

Iran.—Solif., Kraus (4); Solif., Aran., Roewer (1); Aran., Levi (2).

Iraq.—Ixod., Arthur; Ixod., Hoogstraal & Kaiser (5).

Arabia.—Ixod., Hoogstraal & Kaiser (4).

Afghanistan.—Pseudoscorp., Beier (5); Aran., Denis (7).

Canary Is.—Opil., Spook.

ORIENTAL REGION

India.—Opil., Aran., Roewer (1); Aran., Bole-Gowda; Acar., Agarwal & Kandasami; Acar., Alwar et al.; Acar., Butani; Acar., Channa Basavanna & Puttarudriah; Acar., Fain (4); Acar., Hiregauder; Acar., Kanungo & Biswal.

N.E. India.—Acar., Das & Sengupita.

Assam.—Ixod., Dias, J. A. T. S. (2).

Kashmir.—Scorp., Pseudoscorp., Mani.

Mysore.—Acar., Puttarudriah & Channa Basavanna.

Pakistan.—Acar., Alam.

Burma.—Ixod., Hoogstraal & Kohls (7).

Malaya.—Acar., Vercammen-Grandjean & Audy (2); Hydrach., Viets, K. O.

Taiwan.—Ixod., Sugimoto.

Thailand.—Ixod., Hoogstraal & Kohls (7).

Viet-Nam.—Acar., Schluger et al.

Borneo.—Acar., Evans & Sheals (1).

Java.—Scorp., Uropy., Takashima.

Sumatra.—Acar., Evans & Sheals (1).

Philippine Is.—Acar., Chant (1).

AUSTRALIAN REGION & POLYNESIA

New Guinea.—Aran., Chrysanthus (1); Aran., Forster; Arac., Fain (10), (14); Acar., Womersley.

Dutch East Indies.—Acar., Fain (22).

Australia.—Aran., McKenzie; Ixod., Roberts.

New South Wales.—Aran., Forster; Acar., Lawrence (5); Acar., Lloyd.

Queensland.—Aran., Forster; Aran., Hall; Acar., Domrow; Acar., Grandjean (5); Acar., Womersley.

Victoria.—Acar., Keifer & (2).

Tasmania.—Aran., Forster.

New Zealand.—Aran., Forster; Aran., Marples, R. R.; Acar., Manson & (1); Acar., Stout & Viets.

Polynesia.—Acar., Sellnick (3).

South Pacific.—Aran., Marples.

Chesterfield Is.—Pseudoscorp., Aran., Acar., Cohic.

Fiji.—Aran., Forster.

Hawaii.—Aran., Forster; Acar., Krczal.

New Caledonia.—Ixod., Rageau & Vervent.

Solomon Is.—Acar., Dumbleton.

Tonga.—Aran., Marples.

Upolu.—Aran., Forster.

ETHIOPIAN REGION

Africa.—Acar., Lawrence; Ixod., Hoogstraal & Theiler (8).

West Africa.—Acar., Ryke (1).

Senegal.—Acar., André, M. (2).

French Guinea.—Opil., Roewer.

Portuguese Guinea.—Ixod., Tendeiro.

Gold Coast.—Acar., Robertson (1).

Nigeria.—Acar., Choyce & Reed; Acar., Robertson (1).

Cameroons.—Acar., Gaud & Mouchet & (1), (2); Acar., Lavoipierre (1); Acar., Lawrence (3); Acar., Taufflieb; Acar., Taufflieb & Mouchet (1), (2); Ixod., Morel & Magimel (4).

Arachnida

South Africa.—Scorp., Alexander; Acar., Cumming; Ixod., Fiedler; Ixod., Hoogstraal & Theiler (8); Ixod., Salisbury; Ixod., Stampa; Ixod., Theiler; Ixod., Theiler & Salisbury (5); Acar., Meyer & Ryke.

Basutoland.—Ixod., Arthur (1).

Bechuanaland.—Acar., Lawrence (4); Acar., Till.

S.W. Africa.—Solif., Lawrence (1); Aran., Lawrence (6); Acar., Taufflieb.

Cape Province.—Acar., Fain (17); Acar., Lawrence (4), (7); Acar., Meyer & Ryke (3); Hydrach., Viets, K. (3); Ixod., Arthur (1).

Natal.—Palpig., Remy (1); Aran., Comellini.

Rhodesia.—Acar., Till; Ixod., Arthur (1).

Transvaal.—Acar., Chant (2); Acar., Fain (17); Acar., Lawrence (4); Acar., Meyer & Ryke (1), (2); Acar., Till; Acar., Taufflieb; Ixod., Theiler (1); Hydrach., Schoonbee.

French Sudan.—Pentast., Dolifus.

Sahara.—Aran., Denis (3).

Tchad.—Ixod., Morel & Magimel (4).

Equatorial Africa.—Acar., Vercammen-Grandjean (1).

Angola.—Scorp., Lawrence (1); Aran., Comellini; Acar., Balogh (8); Acar., Cunliffe; Acar., Vercammen-Grandjean (1); Ixod., Dias, V. A. S.; Pentast., Nicoli & Golyan.

Belgian Congo.—Pseudoscorp., Beier; Aran., Comellini; Acar., Balogh (8); Acar., Benoit (1), (2); Acar., Fain (4), (7), (10), (18), (19), (20), (21), (22); Acar., Taufflieb; Acar., Vercammen-Grandjean & (1); Hydrach., Bader (1); Hydrach., Münchberg.

Ruanda-Urundi.—Acar., Fain (7), (11), (17), (18); Acar., Vercammen-Grandjean (1).

East Africa.—Acar., Balogh; Ixod., Dias, J. A. T. S. (1).

Uganda.—Opil., Goodnight & Goodnight; Acar., Taufflieb; Acar., Vercammen-Grandjean (1).

Kenya.—Opil., Goodnight & Goodnight; Ixod., Arthur (1); Ixod., Heisch & McPhee; Ixod., Timms et al; Ixod., Walker & Wiley; Ixod., Walton (2).

Tanganyika.—Aran., Lavoipierre (1); Acar., Balogh; Ixod., Walton (2), (3).

Zanzibar.—Acar., Fain (12); Acar., Vercammen-Grandjean (1); Ixod., Hoogstraal & Theiler (8).

Mosambique.—Acar., Lawrence (7); Acar., Rodrigues; Acar., Ryke; Ixod., Dias, J. A. T. S. (4); Ixod., Tendeiro & (1).

Madagascar.—Opil., Lawrence (2); Acar., Lawrence (3); Acar., Gretillat et al (2); Ixod., Hoogstraal & Theiler (8); Pentast Gretillat & Bryoo (1).

NEARCTIC REGION

Alaska.—Aran., Dondale; Acar., Konno; Acar., Krantz (1).

Aleutian Is.—Aran., Scheffer.

Canada.—Acar., Putman.

British Columbia.—Solif., Spencer; Acar., Chant (2).

Nova Scotia.—Aran., Dondale; Acar., Chant (2).

Ontario.—Acar., Chant (2).

United States of America.—Aran., Baerg; Hydrach., Cook; Hydrach., Habeeb; Tardig., Higgins.

Arizona.—Aran., Barnes; Aran., Dondale; Aran., Levi (1); Acar., Bibby & Tuttle; Acar., McGregor (2).

California.—Acar., Chant (2); Acar., Keifer & (1), (2); Acar., McGregor; Acar., Madsen & Barnes; Acar., Schuster, R. O.; Acari, Wilson, N. S.

Colorado.—Aran., Dondale.

Connecticut.—Acar., Hurlbutt.

Florida.—Acar., Attial (1); Acar., Chant et al (3); Acar., Baker & Strandtmann (1); Acar., Baker & Johnston; Acar., Chant (2); Acar., De Leon & (2), (3).

Georgia.—Acar., Baker & Strandtmann (1).

Idaho.—Acar., Peterson & Raeder.

Illinois.—Acar., Meyer.

Indiana.—Aran., Acar., Nolan; Acar. Osmun.

Iowa.—Acar. Irvin.

Kansas.—Acar., Hicks.

Louisiana.—Acar., Brennan & Loomis (1); Acar., Chant (2).

Maryland.—Aran., Lamore; Acar., Chant (2); Acar., Keifer.

Massachusetts.—Acar., Chant (2).

Michigan.—Aran., Chickering; Acar., Ford; Acar., Hyland & Clark & (1).

Missouri.—Acar., Chant (2).

New Mexico.—Pseudoscorp., Hoff.

New York.—Acar., Chant (2); Acar., Keifer (1).

North Carolina.—Aran., Dondale.

Oklahoma.—Aran., Branson; Pentast., Besch.

Oregon.—Acar., Keifer (1), (2).

Pennsylvania.—Acar., Chant (2); Acar., Keifer; Hydrach., Cribbins.

Tennessee.—Hydrach., Wilson, J. L.

Texas.—Acar., Chant (2).

Utah.—Acar., Alred & Beck (2); Acar., Beck et al; Acar., Davis; Acari, Davis & Nielsen (2).

Vermont.—Hydrach., Mitchell (1).

Virginia.—Acar., Chant (2); Acar., Keifer & (1), (2); Tardig., Riggan.

Washington.—Aran., Dondale; Acar., Chant (2); Ixod., Bacon et al.

Wisconsin.—Opil., Aran., Levi et al (3).

Wyoming.—Hydrach., Cook.

CENTRAL AMERICA

Bahamas Is.—Aran., Levi (1); Acari, Clarkson & Owen; Tardig., Renaud-Debyser (2).

Bermuda.—Acar., Williams, R. W.

Costa Rica.—Aran., Levi (1); Acar., Vives & Zeledón.

Cuba.—Aran., Levi (1).

Dominica.—Acar., Chant (2).

French Antilles.—Ixod., Floc'h & Fauran & (2).

Guatemala.—Aran., Levi (1); Acar., Brennan & Loomis (1); Acar., Chant (2); Acar., Kressal.

Honduras.—Aran., Levi (1); Acar., Garnham & Lewis; Ixod., Becklund.

Jamaica.—Aran., Dondale; Aran., Levi (1); Acar., Evans.

Mexico.—Arach., Gibson & Carrillo; Aran., Barnes; Aran., Levi (1); Acar., Brennan & Jones; Acar., Chant (2); Acar., De Leon (1), (4), (5); Acar., Keifer (2).

Nicaragua.—Aran., Levi (1); Acar., Chant (2).

Panama.—Aran., Levi (1).

Puerto Rico.—Aran., Levi (1); Acar., Chant (2); Acar., Fox.

Salvador.—Acar., Chant (2).

Tortola, B.W.I.—Acar., Chant (2).

Trinidad.—Aran., Levi (1); Ixod., Aitken et al.

SOUTH AMERICA

South America.—Acar. Fain (16).

Amazonas.—Hydrach., Viets, K.

Argentina.—Scorp., Bücherl (3); Pseudoscorp., Beier (2); Aran., Carcavallo; Aran., Schiapelli & Pikelin; Acar., Chant (2); Acar., Lopez Cristobal; Ixod., Boero.

Brazil.—Arach., Barth; Scorp., Bücherl (1), (2), (3); Scorp., Louzeiro; Acar., Berla & (1), (2), (3); Acar., Calcagnino; Acar., Fain (15); Acar., Fain & Bastin (23); Acar., Fonseca & (2); Acar., Fonseca & Trindade (3); Acar., Keifer (2).

Columbia.—Pseudoscorp., Beier (2).

Ecuador.—Pseudoscorp., Beier (2); Opil., Roewer (2); Acar., Chant (2); Acar., McGregor (1).

French Guiana.—Acar., Fauran; Ixod., Floc'h & Fauran & (2).

Peru.—Arach., Sánchez; Pseudoscorp., Beier (2); Opil., Roewer (2); Acar., Fain & Mortelmann (24).

Uruguay.—Pentast., Cristi.

Venezuela.—Acar., Diaz-Ungria; Acar., Fain (10).

MARINE

Red Sea.—Pantop., Marcus; Halacaridae, André, M. (3); Hydrach., Viets, K. (2).

Japan.—Pantop., Utinomi (1).

Great Barrier Reef.—Pantop., Gillett & McNeill.

Gulf of Guinea.—Pantop., Fage.

South Africa.—Pantop., Stock.

Central California.—Pantop., Light et al.

Eastern North Pacific.—Halacaridae, Light et al.

Antarctica.—Pantop., Utinomi.

GEOLOGICAL

Pleistocene.—Aran., Acar., Shotton & Strachan.

Carboniferous.—Scorp. England, Wills.

MYRIAPODA

GENERAL LITERATURE AND HISTORY

Taxonomy.—Functional morphology and taxonomic problems in Chilop. and Diplop., Manton (1).

Collections.—Chilop. and Diplop. at Secret. Agric. and Ganaderia, Mexico, Gibson & Carrillo.

STRUCTURE

Respiratory system.—Stigmata of *Geophilus proximus*, Kaufman.

Reproductive system.—Vestigial members of gonopods of Spirostreptidae, Demange (2); Genitalia of *Graphidostreptus tumuliporus*, Demange (1).

Glands.—Cerebral glands in *Jonespeltis splendidus*, Kesava Prabhu; Anterior glands of Diplop., Tuzet & Manier (1).

Cytology.—Anterior glands of Diplop., *Tuzet & Manier* (1).

Technique.—Mounting Symph. for examination, *Edwards* (3).

PHYSIOLOGY

Nutrition & digestion.—Enzymes of *Scolopendra morsitans*, *Said*.

Osmotic relations.—Chilop., Diplop., *Cloudsley-Thompson*.

Respiration.—Sea weed-inhabiting Chilop., *Wieser & Kanwisher*.

Secretion: external.—Toxic secretion of diplopods, *Vieira & Bührnheim*.

Venom.—Biochemistry of centipede venom, *Kaiser & Michl*; Peptidases & esterases in *Scolopendra morsitans*, *Said* (1); Chemical nature of venom of *Archipulus sabulosus*, *Trave et al.*

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Effects of chemicals.—On *Scutigerella immaculata*, *Waterhouse*.

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TANAUPODIDAE fam. nov. p. 540, Feider (1).

TANAUPODOIDEA superfam. nov. p. 539, Feider (1).

TARSONEMIDAE systematics and ecology p. 713; key to genera p. 739, Schaarschmidt.

TEINOPALPIDAE fam. nov. Sarcoptiformes p. 119, Fain (18); Epimeres as generic characters p. 257 figs., Fain (2).

TENUIPALPIDAE key to S. African genera and species p. 317, Meyer & Ryke (2); Keys to genera and species p. 111 figs., Reck.

TETRANYCHIDAE key to South African genera and species p. 332, Meyer & Ryke (3); Keys to genera and species p. 41 figs., Reck; Structure of tarsal claw p. 146 figs., Wainstein.

TETRANYCHOIDEA key to families, genera and species of Trans-Caucasia with figs., Reck.

THYASINAE key to genera, subgenera and species of North America p. 425, Cook.

TROMBICULIDAE zoogeography and ecology of Central Europe p. 86, Daniel.

TROMBICULIDAE superfam. nov. p. 541, Feider (1).

TROMBIDIA falanx nov. p. 539, Feider (1).

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TYDEIDAE key to South African genera and species p. 409, Meyer & Ryke (1).

TYROGLYPHOIDEA translation of Fauna of U.S.S.R., Ratcliffe & Hughes.

UCHIDASTYGACARIDAE fam. nov. Hydrachnella p. 445, Imamura.

VEIGAIIDAE key to genera p. 201, Evans.

Acarapis woodi ♀ p. 809 fig., Schaarschmidt.

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Acarophenax bambicensis sp. nov. France p. 551 figs.; *A. nicolae* sp. nov. France p. 553 fig.; *A. traegardhi* nom. nov. pro *Tarsonemoides termophilus* Trägårdh ♂ p. 555, Kresal; *A. dermestidarum* sp. nov. ♀. ♂ off *Dermestes* spp., Germany p. 425 figs.; biology and ecology p. 413 figs., Reck.

Acarus siro tauteke var. nov. off *Capra sibirica*, U.S.S.R. p. 241, Jakunin; *A. siro* ♂. ♀ nymphs, larva, key p. 439 figs., Knüll (1).

Aceria fagerinea sp. nov. ♀ off *Fagus grandiflora*, Hawley, Pennsylvania p. 650, Keifer; *A. breakeyi* sp. nov. ♀ off *Ribes roezlii*, Nevada Co., California p. 272; *A. krafstella* sp. nov. ♀. ♂ *Purshia tridentata*, Deschutes Co., Oregon p. 271 fig.; *A. tridentatae* sp. nov. ♀. ♂ off *Purshia tridentata*, Morrow Co., Oregon p. 272, Keifer (1); *A. georgioui* sp. nov. ♀ off *Dianthus* sp., Nicosia, Cyprus p. 1 figs.; *A. prostantherae* sp. nov. ♀ off *Prostanthera lasianthus*, Burnley, Victoria, Australia p. 17, Keifer (2); *A. ambrosiae* sp. nov. ♀ off *Ambrosia pilosostachya*, Riverside Co., California p. 142 figs.; *A. boulesiae* sp. nov. ♀ off *Bowlesia lobata*, Riverside Co., California p. 144 figs.; *A. brevisetacea* sp. nov. ♀ off *Purshia glandulosa*, San Bernardino Co., California p. 144 figs.; *A. chrysophami* sp. nov. ♀ off *Chrysanthemum* sp., Los Angeles Co., California p. 142 figs.; *A. cynodonis* sp. nov. ♀ off *Cynodon dactylon*, Riverside Co., California p. 142 figs.; *A. purshiae* sp. nov. ♀ off *Purshia glandulosa*, San Bernardino Co., California p. 144 figs., Wilson, N. S.; *A. mangiferae* and *A. sheldoni* new to Florida p. 180, Attiah (1); *A. sheldoni* p. 31 figs., Rivero.

Acherontacarus vietsi ♂ p. 165 figs.; *A. rutilans* ♀. nym. p. 166 figs., Angelier (3).

Achipteria distincta sp. nov. Kotoku, Japan p. 160 fig., Aoki.

Aciota gen. nov. Phyllocoptinae p. 7; type species *A. costae* sp. nov. ♀. ♂ off *Tibouchina mutabilis*, Campinas, Brazil p. 9 figs., Keifer (2).

Acomatacarus (Austracarus) wittebolsi sp. nov. larva off *Chlorotalpa stuhlmanni*, Bukavu, Belgian Congo p. 253 figs., Vercammen-Grandjean; *A. yosanoi*, transference of spermatophore p. 409 figs., Wen (2).

Aculus gen. nov. Phyllocoptinae p. 5; type species *Phyllocoptes ligustri* K. p. 5; *A. pelekassi* sp. nov. ♀ off citrus, mandarin and orange, Preveza, Greece p. 6 figs., Keifer (2); *A. copallina* sp. nov. ♀ off *Rhizo copallina*, Greenbelt, Maryland p. 652, Keifer.

Aeroglyphus peregrinus ♂. ♀ redescribed p. 2 figs.; *A. robustus* ♂ described, ♀ redescribed p. 10 figs., Cooreman (2).

Africobates evansi sp. nov. Lumeje Id., Angola p. 104 figs.; *A. macfarlanei* sp. nov. Chicapa, Angola p. 104 figs., Balogh (3).

Africribates undulatus sp. nov. Kibosha, East Africa, p. 16 figs., Balogh.

Agapornyesus gen. nov. Rhinonyssidae p. 376; type species *A. Jaini* sp. nov. ♀ off *Agapornis cana*, Tananarive, Madagascar p. 376 fig., Gretillat et al. (2).

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Alabidocarpus diceratops sp. nov. ♀ off *Rhinolophus capensis*, Table Mt., South Africa p. 574 fig.; key to South African species p. 575, Lawrence (7); *A. recurvus* ♀. ♂ p. 238 figs., Domrow.

Aliphis santodiasi sp. nov. ♀. ♂ off *Catharsius tricornutus*, Tinonganine, Mozambique p. 13 figs., Ryke.

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Allophilaelaps subgen. nov. see *Dinogamasus*, Cunliffe.

Amazonella polypora curvimarginata subsp. nov. ♂ Igarapé Curi, Amazons p. 145 figs.; *A. polypora* ♂. ♀ p. 144 figs., Viets, K.

Ambylygamatus (?) *mirabilis* p. 101 figs.; *A. septentrionalis norvegicus* p. 99 fig., Halášková.

Amblyomma lataudae sp. nov. nym. off *Lataudia colubrina*, Nouméa, New Caledonia, p. 284 figs. [see WARBURTON 1933], Ragoon & Vervent; *A. imitator* new to Honduras p. 430, Becklund; *A. compressum* ♂. ♀ distribution and hosts p. 1 figs.; *A. magnum* comb. nov. ♂. ♀ p. 7 figs., Diaz, J. A. T. S. (1); *A. falsomarmoreum* ♂. ♀ p. 87 figs.; *A. marmoreum* ♂. ♀ N.L. p. 54 figs.; *A. nocens* ♂ p. 101 fig.; *A. nuttalli* ♂. ♀ N.L. p. 77 figs.; *A. paulopunctatum* ♂. ♀ p. 93 figs.; *A. pomposum* ♂ p. 100 fig.; *A. sparuscum* ♂. ♀ N.L. p. 66 figs. host lists and distribution, Theiler & Salisbury (5); *A. eburneum* ♂. ♀ p. 410 figs.; *A. gemma* ♂. ♀ p. 441 figs., Tendeiro (1); *A.*, list of species in French Guinea and Antilles; key to species and list of hosts p. 216, Flach & Fauran.

Amblyomma orientalis sp. nov. ♀. ♂ off *Quercus crispula*, Sapporo, Japan p. 291 figs.; *A. tsugawai* sp. nov. ♀ on apple, Kuroishi, Japan p. 290 figs.; *A. largoensis* ♀ p. 293 figs.; *A. rademacheri* ♀. ♂ p. 288 figs., Ehara; *A. leucophaeum* sp. nov. ♀. ♂ between Fort-de-l'Eau and L'Oued Hamiz, Algeria p. 139 figs.; *A. bellinus* ♂ p. 147 fig.; key to group of species p. 135; key to species of *cucumeris* group p. 138, Athias-Henriot; *A. coronatus* comb. nov. pro *Borinquelaelaps* c. Fox 1946; *A. setzelous* comb. nov. pro *B. s.* Fox 1949; *A. setulus* comb. nov. pro *B. s.* Fox 1947, all p. 192, Athias-Henriot (4); *A. musas* Garman 1958 syn. of *Typhlodromus perlongisetus* (Berlese) p. 84; *A. orientalis* Ehara 1959 syn. of *Typhlodromus (A.) gracilis* (Garman) p. 95, Chant (2).

Ameroseius (?K.) *pennatus* comb. nov. pro *Borinquelaelaps* p. Fox 1949 p. 192; *A. (?K.) cristatus* comb. nov. pro *Lasioseius* c. Hull 1925 p. 192; *A. gracilis* comb. nov. pro *Lasioseius* g. Halbert 1923 p. 192, Athias-Henriot (4).

Anachiptera kittenbergeri sp. nov. Kiboshia, East Africa p. 15 figs., Balogh.

Analges cercodons sp. nov. ♂ off *Cossypha cyanocampterus*, Cameroons p. 156 fig.; *A. eurygaster* sp. nov. ♂ off *Dicrurus adsimilis*, Yaoundé, Cameroons p. 159 fig.; *A. leiopus* sp. nov. ♂ off *Bleda eximia notata* and *Charatillas gracilis*, Yaoundé, Cameroons p. 159 fig.; *A. corvinus* ♂ p. 157 figs.; *A. corvinus minor* ♂ p. 158 fig.; *A. spiniger* ♂. ♂ p. 155 figs.; *A. unidentatus* ♂ p. 150 fig., Gaud & Mouchet.

Ancystropus telepui sp. nov. ♀ off *Rousettus aegyptiacus*, in grottos of Kakontwe, Belgian Congo p. 106 figs., Benoit (2).

Androlaelaps fozi sp. nov. ♀ off *Zygodontomys pixuna*, Pernambuco, Brazil p. 180 figs., Fonseca (2).

Anhemialges gen. nov. Analgesidae: Analgesinae p. 159; type species *Megninia longipes* Trouessart 1899 p. 159, Gaud & Mouchet.

Anoripoda gen. nov. Oripodidae p. 133; type species *A. nasalis* sp. nov. ♀ Raiatea, Polynesia p. 135 fig., Sellnick (3).

Anothopoda gen. nov. Eriophyidae p. 655; type species *A. johnstoni* sp. nov. ♀ off *Prostanthera lasianthus*, Burnley, Victoria p. 655 fig., Keifer.

Anthoseius gen. nov. Phytoseiidae p. 257; type species *A. hebetis* sp. nov. ♀. N.L. off flower of *Heliotropium parviflorum*, Key Largo, Florida p. 260, DeLeon (2).

Aplonobia histrinica ♀ p. 358 figs., Meyer & Ryke (3).

Archidispus subgen. nov. see *Imparipes* p. 663, Karabat.

Arctoseius simplex comb. nov. pro *Laelaps simplex* Halbert 1923 p. 192, Athias-Henriot (4).

Ardeialges gen. nov. Pterolichidae p. 528; type species *A. dermogaster* sp. nov. ♂. ♀ off *Tigriornis leucolophus* (Ardeidae), Kribi, Cameroons p. 528 figs., Gaud & Mouchet (1).

Argas persicus new to Tanganyika p. 573, Walton (3).

Arrenurus (Megaluracarus) extensus sp. nov. ♂ Igarapé Curi, Amazonas p. 159 figs.; *A. (M.) unisetiger* sp. nov. ♂. ♀ Rio Negro, Amazonas p. 161 figs.; *A. acutidentatus* sp. nov. ♀ Rio Negro, Amazonas p. 163 figs.; *A. papilliger* sp. nov. ♀ Igarapé-asáu, Amazonas p. 164 figs.; Viets, K.; *A. hercynius* sp. nov. ♀ Ahnlichkeit, Germany p. 457 figs., Viets, K. (4); *A. (Megaluracarus) mabaliensis* sp. nov. ♂. ♀ Mabali, Belgian Congo p. 260 fig.; *A. (M.) marlieri* sp. nov. ♂. ♀ Mabali, Belgian Congo p. 258 fig., Bader (1); *A. (Micruracarus) pygmaeus* ♂. ♀ p. 136 figs., Angelier (1); *A. (T.) troglobioides* ♂. ♀ p. 188 figs., Angelier (3); *A. retrodubius* sp. nov. larva off *Tramea basilaris* (Libell.); ♀ Elisabethville, Belgian Congo p. 264 figs., Münchberg; *A. pustulator* ♀ p. 363 figs.; *A. tricuspidator* ♂. ♀ p. 363 figs.; *A. (M.) buccinator* ♀ p. 363 figs., Münchberg (1); *A. leuckarti latigenitalis* new to France p. 64, Schwoerbel (2); *A. (M.) bicorniculatus* ♂ p. 425 figs.; *A. (M.) pulcher* ♂ p. 424 fig., Viets, K.O.; *A. (M.) adnatus* ♀ p. 205 figs., Viets, K.O. (1); *A. (Arrenurus) uniprojectus* sp. nov. ♂ Robertson Co., Tennessee p. 239 figs.; *A. (Megaluracarus) falciacutatus* sp. nov. ♂ Cheatham Co., Tennessee p. 241 figs.; *A. (M.) pseudoaphelocerus* sp. nov. ♂ Franklin Co., Tennessee p. 244 figs.; *A. (M.) unisinusatus* sp. nov. ♂ White Co., Tennessee p. 242 figs., Wilson, J. L.

Asca bicornis ♂. ♀ p. 17 figs., Halášková.

Ascoschöngastia bennuensis sp. nov. larva off *Mastomys coucha*, Garoua, Cameroons p. 235 figs., Taufflieb & Mouchet (1); *A. (Larentella) mcninchii* sp. nov. larva off *Gliurus japonicus* (dormouse), Gumma Pref., Japan p. 187 fig., Asanuma.

Asctacus barbara sp. nov. ♀ off *Prunus lyoni*, Santa Barbara, California p. 9 fig., Keifer (2).

Asperoseius africanus p. 111 figs., Chant (2).

Atractides (s. str.) *limnicola* sp. nov. ♀ Lac Gérardmer, France p. 39 figs., Schwoerbel (2); *(A. str.) nodipalpis corsicus* ♂. ♀ p. 129 figs.; *A. (s. str.) latipes* ♀ p. 127 figs.; *A. (s. str.) subasper* ♂. ♀ p. 124 figs.; *A. (R.) pavesii* ♀ p. 132 figs., Angelier (1); *A. distans* ♂ p. 434 figs.; *A. primitivus* ♂. ♀ p. 435 figs., Viets, K. (4); *A. gracilipes* ♂ p. 177 figs., Angelier (3).

Atricholaelaps (A.) *guimaraesi* sp. nov. ♀ off *Hesperomys* sp., Brazil p. 172 figs.; *A. (A.) willmanni* sp. nov. ♀ off *Zygodontomys pixuna*, Pernambuco, Brazil p. 170 figs.; *A. (Ischnolaelaps) keegani* sp. nov. ♀ off *Oryzomys subflavus*, Brazil p. 174 figs.; *A. (I.) glasgowi* ♀ p. 176 figs., Fonseca (2); *A.* discussed p. 45, Fonseca.

Austroritria gen. nov. Phthiracaridae p. 144; type species *A. quadricarinata* sp. nov. Rapa, Polynesia p. 144 fig., Sellnick (3).

Bakeracarus gen. nov. Sarcoptidae p. 162; type species *B. lassonycterus* (Boyd 1950) p. 162, Fain (2).

Balaustium bipilum sp. nov. ♀. N. Potchefstroom, Transvaal p. 312 figs.; *B. cristatum* sp. nov. N. L. Malelane, South Africa p. 314 figs.; *B. graminum* sp. nov. N. N. Grabow, South Africa p. 316 figs.; *B. medicaginis* sp. nov. ♀. N. Caledon, Cape Province p. 310 figs.; *B. vignae* sp. nov. ♀. N. Kaap Muiden, South Africa p. 310 figs., Meyer & Ryke; *B. florale*, development p. 159 figs., Grandjean (2).

Balcanohydracarus corsicus ♀ p. 186 figs., Angelier (3); *B. latus* ♂. ♀ Hachioji City, Japan p. 448 figs., Imamura.

Bandakia corsica ♀ p. 176 figs., Angelier (3).

Bdellonyssus bacoti new to Hungary p. 427, Aradi; *B.* discussed p. 45, Fonseca.

Benoibates humeratus sp. nov. Cameia, Angola p. 102 figs., Balogh (3).

Benoitissus najae, rhagidial organ p. 358 figs., Fain (13).

Berlesella aestivalis ♀ p. 160 fig., Gaud & Mouchet.

Bewisia fiedlermaus ♀. ♂ p. 233 figs., Domrow.

Blankaartia rageaui sp. nov. *rageaui* subsp. nov. larva off *Actiphilornis africanus*, Cameroons p. 233 figs.; *B. rageaui ardeolae* subsp. nov. larva off *Aerdeola ralloides*, Yaoundé, Cameroons p. 235; *B. acuscutellaris* new to Africa p. 233, Taufflieb & Mouchet (1).

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Boydia (Boydia) *posita* sp. nov. ♀ larva in nasal cavities of *Pionites melanocephala*, [Aves] Zoo at Antwerp, origin Peru p. 16 figs., Fain & Mortelmans (24); *B. tyrannis* sp. nov. ♀ larva off kingbird, *Tyrannus tyrannus*, Hickory Corners, Michigan p. 380 figs., Ford.

Brephoscelis exquisitus sp. nov. ♂ off *Pipra erythrocephala* rubrococca, Recife, Brazil p. 3 figs.; *B. dielytra* ♂ p. 1 figs., Berla (1).

Brevipalpus californicus distribution map 107, Commw. Inst. Ent. (3); *B. californicus* ♀ p. 318 figs.; *B. obovatus* sp. 319 figs., Meyer & Ryke (2); *B. pennatissimus* deutonym. p. 390 fig., Wainstein (1); *B. phoenicia* distribution map 106, Commw. Inst. Ent. (2); ♂ sp. off *Psidium guajava*, Maddur, Mysore p. 372 figs., Puttarudrula & Channa Basavanna.

Bryobia ulicis sp. nov. ♀. ♂ Herts., England off *Ulez europeus*, p. 44 figs., Eyndhoven; *B. graminum*, *B. kissoiphila*, *B. rubriculus*, biology p. 191 figs.; key to these species p. 210, Gäbele; *B. praetiosa* ♀ p. 354 figs., Meyer & Ryke (3).

Burhinacarus reticulatus sp. nov. ♂. ♀ off *Burhinus senegalensis* (Burhinidae), Yaoundé, Cameroons p. 486 fig.; *B. pallidus* ♂ p. 487 fig., Gaud & Mouchet (1).

Bychovskiana nudidorsa sp. nov. ♂. ♀ off *Xiphidioporus albiceps* (Charadriidae), Saa, Cameroons p. 500 fig., Gaud & Mouchet (1).

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Calaozia gen. nov. Pterolichidae p. 530; type species *Pterolichus circiniger* Mégain & Trouessart p. 530; *C. bycanisti* sp. nov. ♂. ♀ off *Bycanistes albotibialis*, *B. sharpei*, *Tockus camurus* and *Tropicurus albocristatus*, Cameroons p. 530 figs.; *C. decorata* sp. nov. ♂. ♀ off *Bycanistes albotibialis*, Cameroons p. 533 fig., Gaud & Mouchet (1).

Caloppia vargai sp. nov. Arusha, Tanganyika, p. 13 figs., Balogh.

Camisia lapponica new to Japan p. 132; *C. segnis* new to Japan p. 133 figs., Aoki (2).

Caraboacarus gen. nov. Pyemotidae p. 570; type species *C. stammeri* sp. nov. France p. 570 fig., Krezal.

Carabodes bellus sp. nov. Sakasa-Gawa, Japan p. 157 fig.; *C. rimosus* sp. nov. Kotoku, Japan p. 159 fig., Aoki; *C. granosus* sp. nov. ♀ Raivavae, Polynesia p. 118 fig.; *C. imperfecta* sp. nov. ♀ Rurutu, Polynesia p. 119 fig., Sellnick (3).

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Catarhinus gen. nov. Rhyncaphytoptinac p. 11; type species *C. tricholaenae* sp. nov. ♀ off *Tricholaena rosea*, Campinas, Brazil p. 12 figs., Keifer (2).

Caudifera gen. nov. Pterolichidae p. 533; type species *Pterolichus marginatus* Trouessart 1886 p. 534, Gaud & Mouchet (1).

Cecidophyes lyrata sp. nov. ♀ off *Quercus lyrata*, Greenbelt, Maryland p. 650 fig., Keifer.

Cecidophyopsis gen. nov. Eriophyinae p. 273; type species *Phytoplus vermiformis* Nalepa 1889 p. 273, Keifer (1).

Cepheus cepheiformis new to Japan p. 133; *C. latus* new to Japan p. 133, Aoki (2).

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Cheyletus eruditus biology and ecology p. 175 figs., Boczek.

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Chirnysus gen. nov. Sarcoptidae p. 119; type species *C. myotica* sp. nov. ♂. larva off *Myotis myotis*, Grotte de Han, Belgium p. 119 figs., Fain (1); *C. africanus* sp. nov. ♂. ♀ off *Coleura afra*, [Mamm.] Mont Wago, Blukwa, Belgian Congo, also off *Coleura gallarum* p. 251 figs.; gen. redefined p. 251, Fain (20).

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Chorioptes creweei ♀. ♂ p. 354 figs.; *C. bovis* ♀. ♂ p. 354 figs., Lavoipierre.

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Cosmolaelaps bregetovae sp. nov. ♀. ♂ off *Microtus raticulus*, also off *Clethrionomys glareolus*, Zarechye Id., Ukraine p. 101 figs., Piranyk.

Cyrthydrolaelaps hirtus ♀. ♂ p. 202 figs.; *C. incisus* ♀. ♂ p. 206 figs., Evans.

Cyrtolaelaps mucronatus ♂ p. 14 fig., Cooreman (3).

Damaeus (S.) *boreus*, development, life history and cultivation p. 1663 figs., Sitnikova.

Dartia parva ♀. ♂ p. 81 figs., Angelier (1).

Dendrouropoda gen. nov. Uropodidae p. 100; type species *D. schulzi* sp. nov. ♂ Al Ghadara, Egypt p. 102 figs., Willmann; *D. vallei* sp. nov. ♂. ♀ Gulf Aranci, Sardinia p. 39 figs., Sellnick.

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Diplobodes frondosus sp. nov. Miyazaki Pref., Japan p. 12 fig., Aoki (1).

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Diversipes zwölferi sp. nov. Poland p. 666 fig.; *D. exhalatus* sp. 666 fig., Karafiat.

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Feronia brevirostrata sp. nov. ♀ Bathurst, South Africa p. 322 figs., Meyer & Ryke.

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Gabucinia dobyi sp. nov. ♂. ♀ off *Stephanoactes coronatus*, *Gyphohierax angolensis*, *Pseudogyps africanus* and *Necrosyrtes monachus*, Cameroons p. 536 fig.; *G. hyalothriza* sp. nov. ♂. ♀ off *Gyphohierax angolensis* and *Hieraetus ayresii*, Cameroons p. 538 fig.; *G. petitoti* sp. nov. ♂. ♀ off *Caprimulgus fossii* (Caprimulgidae) Cameroons p. 541 fig.; *G. ramosa* sp. nov. ♂. ♀ off *Pernis apivorus* (Accipitridae), Yaoundé, Cameroons p. 541 figs.; *G. similis* sp. nov. ♂. ♀ off *Gymnogenys typicus pectoralis*, (Accipitridae), Yaoundé, Cameroons p. 543 fig., Gaud & Mouchet (1).

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Halarachne erratica sp. nov. ♀ in larynx of *Pygoscelis papuensis* (Penguin), Zoo at Antwerp p. 22 figs., Fain & Mortelmanns (25).

Halixodes chitonis stoutae subsp. nymph from mantle cavity of *Sigapatella novae-zelandiae* [Gastrop.], Lyttleton Harbour, New Zealand p. 203 figs., Viet in STOUT & VIETS.

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Histioptaster ibericus sp. nov. ♂. ♀ on oak and elm trees, Tbilisi, Georgia p. 75 figs., Kadzharya.

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Humerobates perkini comb. nov. pro *H. humeralis perkini* Jacot p. 125 fig., Sellnick (3).

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Hyalomma anatolicum anatolicum ♂. ♀ p. 244 figs.; *H. anatolicum excavatum* ♂. ♀ p. 250 figs.; *H. lusitanicum* ♂. ♀ p. 256 figs.; *H. (Hyalomma) rhipicephaloides* = *H. (Hyalomma) anatolicum* p. 244, Hoogstraal & Kaiser (3); *H.* spp. in France p. 552, Morel (2).

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Hydryphantes (*Polychydryphantes*) *longicornis* sp. nov. ♀ Krasnodar Land, USSR p. 360 fig., Yankovskaya; *H. ramosus* nymph p. 130 figs., Viets, K.; *H. acutus acutus* ♀ p. 132 figs.; *H. flexosus* ♀ p. 133 fig.; *H. lamellatus* ♀ p. 130 figs., Ponzi.

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Hypoaspis (*Julolaelaps*) *myriapodalis* sp. nov. ♀. ♂. deutonym, off spirostreptid millepede, West Africa p. 12 figs.; *H. (J.) paravolutundatus* sp. nov. ♀. ♂. deutonym, off spirostreptid millepede, West Africa p. 16 figs.; *H. (J.) treptensis* sp. nov. ♀. ♂. deutonym, off spirostreptid millepede, West Africa p. 9 figs.; *H. (J.) dispar* p. 19 fig.; *H. (C.) amazon* p. 7 figs.; *H. (J.)* key to species p. 9; *H. indicus* = *H. (J.) luctator* Berl. p. 20; *H. (J.) rotundatus* Berl. = *H. spirostrepti* p. 7, Ryke (1).

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Klinckowstroemiella helleri ♂. ♀ comb. nov. pro *Fedrizziella helleri* Oudemans 1929 p. 281 figs.; key to species p. 288, Womersley (1).

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Krendowskia (*Neokrendowskia*) *mediolineata* sp. nov. ♀ Rio Maró, Amazonas p. 151 figs., Viets, K.

Labidostomma aethiopicum sp. nov. ♀ Bathurst, South Africa p. 417 figs., Meyer & Ryke (1).

Laelaps brandbergensis sp. nov. ♀ off *Petromyscus collaris*, Brandberg, S.W. Africa p. 400 fig.; *L. congolica* sp. nov. ♀ off *Oenomyss hypoxanthus*, Brazzaville, Moyen-Congo p. 397 fig.; *L. kampalensis* sp. nov. ♀ off *Lemniscomys striatus*, Kampala, Uganda p. 402 fig.; *L. mouchei* sp. nov. ♀ off rats, Yaoundé, Cameroons p. 398 fig.; *L. peregrinus* sp. nov. ♀ off *Rhabdomys pumilio* and off *Otomyss* sp., Pilgrim's Rest, Transvaal p. 400 fig.; *L. praomyia* sp. nov. ♀ off *Praomys tullbergi*, Brazzaville, Moyen-Congo, also off *Hylomyscus* sp., Cameroons p. 394 fig.; *L. tillae* sp. nov. ♀ off *Rattus natalensis*, and off *Lemniscomys griselda*, Kruger National Park p. 403 fig.; key to African species p. 404, Taufflieb; *L. castrovii* sp. nov. ♀ off *Oryzomys elivurus*, Pernambuco, Brazil p. 116 figs.; *L. differens* ♀ p. 119 figs.; *L. exceptionalis* ♀ p. 131 figs.; *L. lateventralis* ♂. ♀ p. 122 figs.; *L. mangunkhosi* ♀ p. 129 figs.; *L. nuttalli* ♀ p. 120 figs.; *L. paulistanensis* ♂. ♀ p. 132 figs., Fonseca (2); *L. elethronomydis* ♀. ♂ new to Japan p. 49 figs., Yamashita & Konno.

Laelaptonyssus phytoseioides sp. nov. ♀ off Hemiptera, Oakland, Florida p. 275 figs., Baker & Johnston.

Laelaps markewitschi sp. nov. ♀. ♂ off *Microtus arvalis*, also off *M. rutilus*, off *Apodemus agrarius*, off *Clethrionomys glareolus*, Zarechye Id., Ukraine p. 97 figs., Piranyk.

Lasiobelba gen. nov. Hypochthoniidae p. 5; type species *L. remota* sp. nov. Miyazaki Pref., Japan p. 6 fig., Aoki (1).

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Lebertia crenophila ♀ p. 29 figs.; *L. sefiei* ♀ p. 29 figs.; *L. tenuicollis* ♂. ♀ p. 30 figs. all new to France, Schwoerbel (2); *L. (Pseudolebertia) corsica* ♂. ♀ p. 88 figs.; *L. (s. str.) magisoi* ♂. ♀ p. 84 figs., Angelier (1).

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Leptotrombidium buttneri sp. nov. larva off *Oryctolagus cuniculi*, Casablanca, Morocco p. 249 figs.; *L. gallardi* sp. nov. larva off *Oryctolagus cuniculi* and off *Psammodromus algirus*, Casablanca, Morocco p. 248 figs.; *Verammen-Grandjean* in *VERCAMMEN-GRANDJEAN & TAUFFLIER*; *L. buttneri* var. *psammodromi* var. nov. larva off *Psammodromus* sp. Morocco p. 251 figs., *Taufflieb* in *VERCAMMEN-GRANDJEAN* and *TAUFFLIER* (4).

Leptus intermedius sp. nov. Bathurst, South Africa p. 317 figs., *Meyer & Ryke*.

Liacarus orthogonios sp. nov. Kagawa Pref., Japan, p. 16 fig., *Aoki* (1).

Liebstadia foveolata forma *tridactyla* nov. Kibosha, East Africa p. 15 fig.; *L. foveolata* p. 15 figs., *Balogh*.

Limnesia minutidentata ♂. ♀ p. 134 figs., *Viets*, K.

Liodes zimmermani sp. nov. Marotiri, Polynesia p. 116 fig.; *L. bataviensis* p. 118 fig.; *L. hawaiiensis* p. 116 fig., *Sellnick* (3).

Listrophoroides pauliani sp. nov. ♂. ♀. N. off *Lepilemur ruficaudatus*, Morondava, Madagascar p. 119 figs.; *L. squamosus* sp. nov. ♂. ♀. N. off *Lepilemur mustelinus*, Ambatolampy, Madagascar p. 115 figs., *Lawrence* (3); *L. dasymys* ♂. ♀ p. 116 figs., *Lawrence*.

Litarachna denhami ♂. ♀ p. 109 figs., *Viets*, K. (2).

Lobogynoides obtusum ♂ described p. 474 figs., *Hicks*, *Lobohalacarus weberi* *quadriforus* p. 485 figs., *Viets*, K. (4).

Lorryia formosa sp. nov. ♀ off *Citrus*, Rharb, Morocco p. 6 figs., *Cooreman* (4).

Machadobelus symmetrica p. 14 figs., *Balogh*.

Macrocheles subglaber sp. nov. Italy p. 210; *M. glaber* complex discussed p. 199, *Filipponi*; *M. zumpti* sp. nov. ♀ off *Catharsius tricornutus* (Coleopt.), Tinonganime, Mozambique p. 14 figs.; *M. neovernalis* ♀ new to Mozambique p. 18, *Ryke*.

Macroscius gen. nov. Phytoseiidae p. 808; type species *M. biscutatus* sp. nov. ♀. ♂ off pitcher plant, *Sarracenia* sp.; Alachua Co., Florida p. 808 figs., *Chant* et al. (8).

Macrostigmus bakeri sp. nov. off Bermuda grass (*Cynodon dactylon*), Phoenix, Arizona p. 223 figs., *McGregor* (2).

Megazeles gen. nov. Microzetidae p. 106; type species *M. micropterus* sp. nov. Dundo, Angola p. 106 figs., *Balogh* (3).

Megnini articulata sp. nov. ♂. ♀ off *Francolinus bicalcaratus* and *F. squamatus*, South Cameroons p. 163 fig.; *M. carreti* sp. nov. ♂. ♀ off *Ceuthmochares aereus*, Ambam, South Cameroons p. 164 figs.; *M. contorta* sp. nov. ♂. ♀ off *Colius striatus nigricollis*, Yaoundé, Cameroons p. 166 figs.; *M. grandispina* sp. nov. ♂. ♀ off *Colius striatus nigricollis*, Yaoundé, Cameroons p. 167 figs.; *M. turaci* sp. nov. ♂. ♀ off *Turacopsis persica*, Ambam, South Cameroons p. 169 fig.; *M. cubitalis* ♀. ♂ p. 167 figs., *Gaud & Mouchet*.

Megniniella gen. nov. Analgesidae: Analgesinae p. 170; type species *Megniniella gallinulae* (Buchholz 1869) p. 170; *M. limnocoracis* sp. nov. ♂. ♀ off *Limnocorax flavirostris* Yaoundé, Cameroons p. 170 figs.; *M. nigricauda* sp. nov. ♂. ♀ off *Crinifer piscator*, Ngaoundéré, Cameroons p. 171 fig., *Gaud & Mouchet*.

Melichares (B.) mali ♀ p. 163 figs.; *M. tarsalis* ♂ p. 162 fig., *Athias-Henriot* (4).

Membranolobus camuri sp. nov. ♂. ♀ off *Tockus camurus* (Bucerotidae), Ambam, Cameroons p. 631 figs.; *M. fasciata* sp. nov. ♂. ♀ off *Tockus fasciatus* (Bucerotidae), Meiganga and Ambam, Cameroons p. 634 fig., *Gaud & Mouchet* (2).

Mesalgas piprae sp. nov. ♂ off *Pipra erythrocephala rubracapilla*, Recife, Brazil, p. 14 fig., *Berla* (1); *M. oscinum* ♀ p. 173 fig., *Gaud & Mouchet*.

Metanalges (*Apriyalges* subgen. nov.) type species *M. eurytarus* ♀. ♂ p. 174 figs.; *M. (M.) elongata curta* subsp. nov. ♂. ♀ off *Crecopsis egregia*, Cameroons p. 174 figs., *Gaud & Mouchet*.

Metanoctoedres subgen. nov. see *Noctoedres* p. 133, *Fain* (22).

Microdispidoides karafiati sp. nov. France p. 567 figs., *Kreuz*.

Microzetes grandjeani sp. nov. Kasai, Belgian Congo p. 106 figs., *Balogh* (3).

Mideopsis trifoliata sp. nov. ♀ Igarapé-assu, Amazons p. 148 figs., *Viets*, K.

Mochlozetes penetrabilis, adult and tritonym p. 453 figs.; gen. defined p. 469, *Grandjean* (1).

Molothrognathus washingtonia sp. nov. ♂ off fan palm, *Washingtonia filifera*, Indio, California p. 112 figs., *McGregor*.

Monomoides lundbladi ♂. ♀ p. 181 figs., *Angelier* (3).

Montchadskiana (*M.*) *hyperschiza* sp. nov. ♂. ♀ off *Hoplopterus spinosus* (Charadriidae), Cameroons p. 475 figs.; *M. (Anapodema) aphylla* sp. nov. ♂. ♀ off *Tockus fasciatus* (Bucerotidae), Cameroons, also off *T. camurus* and *Tropiciranus albocristatus cassini* p. 476 figs.; *M. (A.) aschiza* sp. nov. ♂. ♀ off *Bycanistes sharpei* and *B. albostriatus* (Bucerotidae), Cameroons p. 478 figs.; *M. (A.) stronglyphylla* sp. nov. ♂. ♀ off *Bycanistes albostriatus* and *B. sharpei* (Bucerotidae), Cameroons p. 478 figs.; *M. (A.) trichonota* sp. nov. ♂. ♀ off *Ceratogymna atrata* (Bucerotidae), Ambam, Cameroons p. 480 figs.; *M. buchholzi* ♀ p. 476 fig., *Gaud & Mouchet* (1).

Mortelmansi gen. nov. Lemurynissidae p. 5; type species *M. longus* sp. nov. ♀. ♂. N. in nasal cavities of *Saimiri sciurea* [Mamm.], Zoo at Antwerp, origin South America p. 7 figs.; *M. brevis* sp. nov. ♀. ♂. N. in nasal cavities of *Saimiri sciurea* [Mamm.], Zoo at Antwerp, origin South America p. 9 figs., *Fain* (16).

Mycteronyssus gen. nov. Gastronyssidae p. 284; type species *M. polli* sp. nov. ♀ in nasal cavities of *Hypsignathus monstrosus* [Mamm.], Epulu, Belgian Congo p. 285 fig., *Fain* (21).

Myonyssus ingricus ♀ p. 185 fig., *Mrciak & Tovornik* (4).

Myrnyssus phalaenodectes ♂. ♀ p. 17 figs., *Schröder*.

Mysolaelaps heteronychus sp. nov. ♀ off *Oxymiceterus angularis*, Caruarú, Brazil p. 145 figs.; *M. microspinosis* ♀. ♂ p. 144 figs.; *M. parvispinosus* ♀ p. 151 figs., *Fonseca* (2).

Mystropria gen. nov. Eremidae p. 33; type species *M. sellnicki* sp. nov. Budapest, Hungary p. 33 figs., *Balogh* (2).

Nanhermannia nana new to Japan p. 133, *Aoki* (2).

Nanolichus gen. nov. Dermoglyphidae p. 462; type species *N. listrophorus* sp. nov. ♂. ♀ off *Streptopelia semitorquata* (Columbiforme), Yaoundé, Cameroons p. 463 figs., *Gaud & Mouchet* (1).

Nasozetes sumatrensis tibial solenidia p. 362 figs., *Grandjean* (4).

Neobalia (*Neobalia*) *bidentata* sp. nov. ♀ Rio Maró, Amazonas p. 145 figs., *Viets*, K.

Neochylettiella faini sp. nov. ♀. ♂ off *Cossypha dichroa*, Mossel Bay, Cape Province p. 431 figs.; *N. subquadrata* sp. nov. ♀. ♂ off *Melittophagus pusillus* (little bee-eater), Kanji, Bechuanaland p. 427 figs.; *N. transvaalica* sp. nov. ♀ off *Melittophagus pusillus*, Mabelikwa, Transvaal p. 430 figs., *Lawrence* (4).

Neodiplogynium vallei sp. nov. ♀ San Juan, Puerto Rico p. 296 figs., Fox.

Neofedrizzia gen. nov. Fedrizziidae p. 30; type species *N. gayi* sp. nov. ♀. ♂ off Passalid beetle, Imbil, Queensland p. 31 fig.; *N. canestrini* sp. nov. ♀. ♂ off Passalid, *Aulacocyclus edentulus*, Hinchinbrook Id., N. Queensland p. 33 fig.; *N. cynota* sp. nov. ♀. ♂ off *Mastochilus dilatus*, Tenterfield, New South Wales p. 35 fig.; *N. camini* sp. nov. ♀. ♂ off *Mastochilus dilatus*, Glen Innes, New South Wales p. 37 fig.; *N. goriroessa* sp. nov. ♀. ♂ off *Mastochilus dilatus*, Hampton, Queensland p. 39 fig.; *N. tragardhi* sp. nov. ♀. ♂ off *Mastochilus dilatus*, Tenterfield, New South Wales p. 41 fig.; *N. vidua* sp. nov. ♀. ♂ off beetle, Mt. Glorious, Queensland p. 43 fig.; *N. brooksi* sp. nov. ♂. ♀ off Passalid, Innisfail, Queensland p. 45 fig.; *N. scutata* sp. nov. ♀ off Passalid, Bulolo, New Guinea p. 47 fig.; key to species p. 50, Womersley.

Neomyobia radfordi sp. nov. ♂. ♀ off *Pipistrellus nanus*, Kivu, Belgian Congo p. 55 figs., Benoit (1).

Neonyssus marcandrei sp. nov. ♀. ♂ in nasal cavities of *Melanophoyx ardesiae*, Lac Itasy, Madagascar p. 379 fig., Gretillat et al. (2).

Neoschöngastia baylissi sp. nov. larva off ringed plover, *Charadrius dubius curonicus*, Kyushu, Japan p. 38 fig., Asanuma (2); *N. shikwanensis* sp. nov. larva off snake, China p. 257 figs., Mo et al.; *N. gallinarum* nymph redescribed, ♀ described p. 174 figs., Jeu.

Neumania (*Tetraneumia*) *breviseta* sp. nov. ♀ Rio Aruá, Amazonas p. 141 figs.; *N. (T.)* sp. ♀ p. 143 figs., Viets, K.; *N. meridiana* sp. nov. ♀ Firgrove, Cape Town p. 47 figs.; *N. verrucipore* sp. nov. ♂ Upper Steenbras River, W. Cape Province p. 49 figs., Viets, K. (3); *N. (Neumania) tokyoensis* sp. nov. ♂ Hachioji City, Japan p. 430 figs., Imamura; *N. agilis* sp. new to France p. 41 fig., Schwoebel (2); *N. pheatricola* ♂. ♀ p. 178 figs., Angelier (3); *N. (s. str.) vietsi* ♂. ♀ p. 134 figs., Angelier (1).

Niphocopeus nivalis delamarei subsp. nov. adult, tritonym., Albères, Pyrénées-Orientales p. 475 figs.; *N. nivalis grandjeani* subsp. nov. adult, Savoy, France p. 487 fig.; *N. nivalis baloghi* subsp. nov. adult, nymphs, Bulgaria p. 493 fig., Travé.

Nippobodes gen. nov. Carabodidae p. 13; type species *N. insolitus* sp. nov. Kagawa Pref., Japan p. 14 fig., Aoki (1).

Nipponacarus (*Nipponacarus* subgen. nov.) *matsumotoi* sp. nov. ♂ Hachioji City, Japan p. 443 fig.; *N. (Hezanipponacarus) subgen. nov.) japonicus* sp. nov. ♂ Hachioji City, Japan p. 444 fig., Imamura.

Notoedres (*Notoedres*) *benoiti* sp. nov. ♀ off *Coleura afra* [Mamm.] Mont Wago, Belgian Congo also off *C. gallarum* p. 149 figs.; *N. (N.) cheironeles* sp. nov. ♀. tritonym. off *Cheiromelus torquatus* [Mamm.] Dutch East Indies p. 151 figs.; *N. (N.) mimetilli* sp. nov. tritonym. off *Mimetillus thomasi* [Mamm.], Katanga, Belgian Congo p. 153 figs.; *N. (N.) plecoti* sp. nov. ♀. nymphs off *Plecotus auritus*, Bruxelles, Belgium p. 150 figs.; *N. (N.) schoutedeni* sp. nov. ♂. ♀. N.L. off *Epesicus tenuipennis* [Mamm.], Buta, Belgian Congo also off *E. ater* p. 143 figs.; *N. (N.) tadaridae* sp. nov. ♀. tritonym. off *Tadarida* (*Chairephon*) *faini*, (Mamm.) Mont Wago, Belgian Congo p. 146 figs.; *N. (N.) myotis* ♀ p. 139 figs.; *N. (Melanotroedres) subgen. nov.)* type *miniopteri* sp. nov. ♂. ♀ off *Miniopterus schreibersi*, Toscane, Italy also off *M. inflatus* and *Pipistrellus nanus* p. 155 figs.; *N. (M.) verheyeni* sp. nov. ♂. tritonym. off *Coleura gallarum*, Moba, Belgian Congo p. 157 figs., Fain (22); *N. chiropteralis* p. 330 figs., Fain (3).

Nothrus oceanicus sp. nov. Raivavae, Polynesia p. 110 fig., Sellnick (3); *N. borussicus* var. *longipilis* var. nov. Standorten, Austria p. 364, Mihelčić.

Notogalumna gen. nov. Galumnidae p. 130; type species *N. praetiosa* sp. nov. Raivavae, Polynesia p. 130 fig., Sellnick (3).

Nycteridocoptes eyndhoveni sp. nov. ♂. ♀ off *Rhinocephalus ferrum-equinum*, Namur, Belgium also off bats from France, Italy, Belgian Congo and Angola p. 332, Fain (3); *N. asiaticus* sp. nov. ♂ off *Eonycteris spelaea*, Farm Caves, Central Asia p. 349 figs.; *N. microphallus* sp. nov. ♂. ♀ off *Eonycteris spelaea*, Asia principally India p. 347 figs.; *N. miniopteri* sp. nov. ♂. ♀ off *Miniopterus inflatus*, Kivu, Belgian Congo p. 342 figs.; *N. eyndhoveni* ♂. ♀ p. 337 figs.; *N. rousettii* ♂ p. 345 figs.; *N. macrophallus* ♀ p. 346 fig.; key to species p. 351, Fain (4); *N. poppei* nymphs p. 120 figs., Fain (9).

Oligonychus proteae sp. nov. ♀ off *Protea incompta*, Humansdorp, Cape Province p. 344 figs.; *O. bicolor* ♀. ♂ p. 341 figs.; *O. pratensis* ♀. ♂ p. 346 figs., Meyer & Ryke (3); *O. yusti* sp. nov. ♀. ♂ off *Camellia*, Cuenca, Ecuador p. 86 figs., McGregor (1).

Onychalges gen. nov. Analgesidae: *Analgesinae* p. 176; type species *Megninia longitarsus* Bonnet 1924 p. 176 fig.; *O. ovatus* sp. nov. ♂. ♀ off *Hyphanturus brachypterus*, Cameroons p. 176 figs., Gaud & Mouchet.

Opilidiaeclips radfordi sp. nov. ♀. ♂. nymphs and larva, off *Natrix natrix* and *Coluber gemmonensis caspius*, Agigea, Rumania p. 211 figs., Feider & Solomon (2).

Oppia bolei sp. nov. Bohinjska Bistrica, Yugoslavia p. 82 fig.; *O. carniolica* sp. nov. Bohinjska Bistrica, Yugoslavia p. 82 fig., Tarman (1); *O. deficiens* sp. nov. Kasai, Belgian Congo p. 96 figs.; *A. deficiens circumcincta* var. nov. Camipopo River, Angola p. 96 fig.; *O. lanceoseta* sp. nov. Kasai, Belgian Congo p. 96 figs.; *O. pilosella* sp. nov. Kasai, Belgian Congo p. 93 figs.; *O. ramiseta* sp. nov. Camipopo River, Angola p. 96 figs.; *O. sol* sp. nov. Kasai, Belgian Congo p. 93 figs., Balogh (3); *O. exempla* sp. nov. Göltzschach, Austria p. 365 fig., Mihelčić; *O. viperina* sp. nov. Ehime Pref., Japan p. 9 fig., Aoki (1); *O. quadricarinata* new to Japan p. 133, Aoki (2).

Opsonyesus gen. nov. Gastronyssidae p. 18; type species *Rodhainyssus brutsaerti* Fain 1956 p. 20; *O. zumpti* sp. nov. ♀ in nasal cavities of *Rhinolophus capensis*, Wynberg Cave, Cape Province p. 20 fig., Fain (17); *O. asiaticus* sp. nov. ♀. ♂ in nasal cavities of *Pteropus giganteus* [Mamm.], loc. p. 10 figs.; *O. phyllorhinae* sp. nov. ♀. ♂. N. in nasal cavities of *Phyllorhina diadema*, Haveri, British New Guinea p. 14 figs.; *O. brutsaerti* subsp. *indica* subsp. nov. ♀ in nasal cavities of *Eonycteris spelaea* [Mamm.], Temasserim Farm Caves, India, also off *Macroglossus lagochroa* [Mamm.] p. 8 fig.; *O. brutsaerti* ♀ p. 8 figs.; *O. brutsaerti eidoloni* p. 10 fig.; *O. zumpti* p. 10 fig.; key to species p. 18, Fain (14); *O. brutsaerti eidoloni* subsp. nov. off *Eidolon helvum*, Kivu, Belgian Congo p. 160, Fain (19).

Oribatella schoutedeni sp. nov. Lumeje Id., Angola p. 106 figs., Balogh (3).

Oribotritis aberrans sp. nov. Vogtland, Germany p. 339 fig., Märkel & Meyer (2); *O. mollis* sp. nov. Miyazaki Pref., Japan p. 19 fig., Aoki (1).

Ornithocheyla gen. nov. Cheyletidae p. 433; type species *O. megaphallus* sp. nov. ♂. ♀ off *Estrilda erythronotos* (black-cheeked waxbill), Debeete, Bechuanaland p. 434 figs., Lawrence (4).

Ornithodoros eboris sp. nov. ♂. ♀. N. L. in porcupine burrow, Magaliesberg Mts., Transvaal p. 145 figs., Theiler (1); *O. solomonis* sp. nov. larva off fruit bat, Vella Lavelia Id., Solomon Is. p. 306 figs.; *O. batuensis* larva p. 306 figs.; *O. salahi* larva p. 307 fig., Dumbleton; *O. arenicolous* new to Tunisia p. 915, Colas-Belcourt & Morel; *O. coniceps*, distribution p. 730, Morel (3); *O. moubata*, South African variant p. 63 figs., Walton (4); *O. tartakovskii* new to China p. 665, Fen; *O.* sp. larva, Arabia p. 299 fig., Hoogstraal & Kaiser (4).

Ornithomyssus pavlovskii sp. nov. ♀ off *Muscardinus avellanarius*, South Carpathian Mts., Rumania p. 484 figs., Lange; *O.* discussed p. 45, Fonseca.

Orripoda ornatissima sp. nov. Chicapa, Angola p. 102 figs., Balogh (3).

Oxus viridissimus ♀ p. 132 figs., Viets, K.

Oxylages gen. nov. Dermoglyphidae p. 480; type species *Thecarthra incerta* Gaud 1952 p. 481, Gaud & Mouchet (1).

Panisopsis (*P.*) *gorhami* ♀ p. 414 figs.; *P.* (*P.*) *pedunculata* ♀. ♂ p. 417 figs.; *P.* (*Panisoides*) *setipes* ♀. ♂ p. 419 figs., Cook.

Panisus cataphractus ♀. ♂ p. 420 figs.; *P.* *condensatus* ♀. ♂ p. 421 figs., Cook.

Panonychus citri ♀. ♂ p. 350 figs., Meyer & Ryke (3).

Parafedrizia gen. nov. Fedrizziidae p. 51; type species *P. buloloensis* sp. nov. ♀. ♂ off Passailo, Bulolo, New Guinea p. 52 fig., Womersley.

Paralgoides gen. nov. Dermoglyphidae p. 457; type species *Paralgoides pteronyssoides* Trouessart p. 458; *P. anoplopus* sp. nov. ♂ off *Cinnyris chloropygius* luhderi (Nectariniidae), Yaounde, Cameroons p. 458 fig.; *P. nototrichus* sp. nov. ♂ off *Guttera edouardi sclateri* (Phasianidae), Obala, Cameroons p. 459 fig., Gaud & Mouchet (1).

Paralgopsis gen. nov. Dermoglyphidae p. 459; type species *Paralgoides paradoxus* Trouessart p. 459, Gaud & Mouchet (1).

Parapetrobia gen. nov. Tetranychidae p. 362; type species *P. capensis* sp. nov. ♀ Grabouw, Cape Province p. 364 figs., Meyer & Ryke (3).

Paraphyoptella gen. nov. Eriophyinae p. 17; type species *P. arnaudi* sp. nov. ♀. ♂ off *Cordia parvifolia*, Guaymas, Mexico p. 18 figs., Keifer (2).

Paraphyoptoidea artemisiae sp. nov. ♀ off *Artemisia tridentata*, San Bernardino Co., California p. 148 figs., Wilson, N. S.

Parasitus coleoptratorum, biology, nutrition propagation and development p. 303 figs., Rapp; *P. intermedius* new to New Zealand p. 170, Manson.

Parasoldanellonyx parviscutatus ♀ p. 490 figs., Viets, K. (4).

Paratetranychus clavatus sp. nov. ♂. ♀ off *Pinus* sp. Hoshida, Japan p. 97 figs., Ehara (1); *P. pilosus*, distribution map 31, Commw. Inst. Ent.

Parawandesia chappuisi ♀ p. 171 figs., Angelier (3).

Passalozeutes inlethalicus sp. nov. St. Johann, Austria p. 369 fig., Mihelčić; *P. africanus* new to Central Bohemia p. 68 fig., Kunst.

Pavania fusiformis p. 565 fig., Krczal.

Pelethiphis mozambicensis sp. nov. ♀ off *Catharsius tricornutus* (Coleopt.), Tinonganine, Mozambique p. 7 figs.; *P. pectinatus* sp. nov. ♂ off *Catharsius tricornutus*, Tinonganine, Mozambique p. 11 figs., Ryke; *P. equestris* ♀ p. 22 figs., Hyatt.

Pelops forsslundi sp. nov. Kibosha, East Africa, p. 18 figs., Balogh.

Peloribates hungaricus p. 17 figs., Balogh.

Pergamasus barbarus var. *viator* var. nov. ♂ Jabkenice, Czechoslovakia p. 103 fig.; *P. beklemishevii* ♀ p. 103 figs., Halasková.

Petiota gen. nov. Analgesidae: Analgesinae p. 178; type species *Dermaleichus aluconis* Buchholz 1870 p. 178 fig., Gaud & Mouchet.

Petrobia harti ♀. ♂ p. 359 figs.; *P. latens* ♀ p. 360 figs., Meyer & Ryke (3).

Phenopelopa rapanensis sp. nov. Teutu, Polynesia p. 142 fig., Sellnick (3).

Photia graeca sp. nov. ♂. ♀ under elytra of *Procrustes coriaceus* v. *foudrasi*, Athens, Greece p. 1 figs., Cooreman (4).

Phyllocoptes graniti sp. nov. ♀ off *Amygdalus communis*, Carovino, Italy p. 275 fig., Keifer (1); *P. sassafrasella* sp. nov. ♀ off *Sassafras officinale*, Greenbelt, Maryland p. 654, Keifer.

Phyllocoptre oleivorus new to South Africa p. 206, Ryke (2); *P. oleivorus*, distribution map 78, Commw. Inst. Ent. (1).

Phyllodromus gen. nov. Phytoseiidae p. 260; type species *P. leiodis* sp. nov. ♀. ♂ off *Waltheria americana*, Miami, Florida p. 260, De Leon (2).

Phyllonothrus gen. nov. Camisiidae p. 112; type species *P. runcifer* sp. nov. Rurutu, Polynesia p. 112 fig., Sellnick (3).

Phyllurales gen. nov. Analgesidae: Analgesinae p. 178; type species *Pteronyssus phyllophorus* Trouessart 1885 p. 179; *P. phyllurus* ♂. ♀ p. 179 figs., Gaud & Trouessart.

Phytoseiulus macropilis p. 109 figs.; *P. persimilis* p. 109 figs.; *P. rieglei* Dosse 1958 syn. of *P. persimilis* Athias-Henriot p. 109, Chant (2).

Phytoseius bakeri sp. nov. ♀. ♂ off plant "XY", St. Petersburg, Florida p. 108 figs.; *P. platypilis* sp. nov. ♀ off *lantana*, Coral Gables, Florida p. 107 figs.; *P. macropilis* p. 107 figs.; *P. plumifer* p. 106 figs., Chant (2); *P. nahuatlensis* sp. nov. ♀ off *Lonchocarpus rugosus*: ♂ off *Rhus schiediana*, Chiapas, Mexico p. 147 figs., De Leon (1); *P. (Dubininellus subgen. nov.) corniger* sp. nov. ♀. ♂ USSR. p. 362 figs., Wainstein (3).

Piona globulata punctata new to France p. 64, Schwoerbel (2).

Pirnodus detectidens ♂. ♀, ecology p. 454 figs., Travé (1).

Plesiolaelaps Womerley = *Spinolaelaps* Radford p. 231, Domrow.

Pleuronectocelaeno austriaca var. *barbara* var. nov. ♂. ♀ Bainem, Algeria p. 29 figs., Athias-Henriot.

Pneumonysus africanus sp. nov. ♂. ♀ from *Cercopithecus mitis*, Zoo at Antwerp, Belgium p. 141 figs.; *P. congoensis* ♀ p. 129 fig.; *P. duttoni* ♂ p. 135 fig.; *P. longus* ♀ p. 137 fig.; *P. mossambicensis* ♀. ♂ p. 132 figs.; *P. rodhaini* ♂ p. 139 fig.; *P. santos-diasi* ♀ p. 131 fig.; *P. simicola* ♀. ♂ p. 132 figs.; *P. vitzthumi* ♀ p. 136 fig.; key to species p. 143; list of hosts p. 128, Fain (6); *P. congoensis* ♂ p. 5 figs.; *P. provocans* ♂ p. 8 figs.; *P. schoutedeni* p. 9 figs., Fain.

Podocinum pacificum ♀ p. 28 figs., Athias-Henriot.

Polypterozetes cherubin, adult and tritonymph p. 147 figs., Grandjean.

Pomerantzevia subgen. nov. see *Rhizicephalus*, Dias, J. A. T. S. (2).

Porolohmanella violacea ♀ p. 190 figs., Angelier (3).

Proctolaelaps intermedius sp. nov. ♀ Beni Messous, Algeria p. 166 fig.; *P. ignotus* sp. nov. ♂ Constantine, Algeria p. 169; *P. (P.) bickleyi* ♂. ♀. protonym. p. 171 figs.; *P. mariposae* comb. nov. pro *Boringolaelaps* m. Fox 1946 p. 192; *P. latisternus* comb. nov. pro *Laelaps* l. Halbert 1923 p. 192; ?*P. parvanalis* comb. nov. pro *Lasiocerous* p. Thor 1930 p. 192, *Athias-Henriot*; *P. hypodaei* ♂ larva p. 645 figs., Mathys & Tencalla (2).

Proctophyllodes minor sp. nov. ♂. ♀ off *Sclerurus scansor*, [Aves] Pedra Branca, Brazil p. 203 figs., Berla (2).

Pronematus pruni sp. nov. off *Prunus domesticus*, Potchefstroom, Transvaal p. 414 fig., Meyer & Ryke (1).

Proprioseius mirandai sp. nov. ♀ off *Lippia umbellata*, Nay: ♂ off agualamo, San Blas, Mexico p. 149 figs., De Leon (1); *P. clancyi* p. 112 figs.; *P. meridionalis* p. 111 figs., Chant (2).

Prosopodectes Canestrini 1897 synonym of *Notoedres* Railliet 1893 p. 324, Fain (3).

Protalges pteropus sp. nov. ♂. ♀ off *Corythaeola cristata*, Yaoundé and Ambam, South Cameroons p. 195 figs.; *P. attenuatus* ♀ p. 193 fig., Gaud & Mouchet.

Proteremella gen. nov. Eremitidae p. 31; type species *P. pulchella* sp. nov. Nadap, Hungary p. 31 figs., Balogh (2).

Protolichus laurenti sp. nov. ♂. ♀ off *Agapornis pullaria* (Psittacidae), Yaoundé, Cameroons p. 635 figs., Gaud & Mouchet (2).

Protobates boraboraensis sp. nov. Borabora, Polynesia p. 140 fig., Sellnick (3); *P. concreta* ♀ p. 85 figs., Sellnick (2); *P. monodactylus* new to Japan p. 134 figs., Aoki (2).

Proverox gen. nov. nr. *Scutovortex* p. 366; type species *P. kühnelti* sp. nov. Austria p. 367 fig., Mihelčič.

Psammotorrenticola gracilis ♂. ♀ p. 173 figs., Angelier (3).

Pseudalloptinus grammophyllus sp. nov. ♂. ♀ off *Psittacus erythacus*, Mbalmayo and Ambam, Cameroons p. 637 figs.; *P. odontopus* sp. nov. ♂. ♀ off *Gypohierax angolensis* (Accipitridae), Yaoundé and Ambam, Cameroons p. 630 figs., Gaud & Mouchet (2).

Pseudofeltia scutigera ♀ new to France p. 50 figs., Schwoerbel (2).

Pseudoschöngastia aberrans sp. nov. larva off *Peromyscus oaxacensis*, Teopisca, Mexico p. 424 fig.; *P. audyi* sp. nov. larva off *Peromyscus g. guatemalensis*, Finca San Rafael, Guatemala p. 423 fig.; *P. hypopsis* sp. nov. larva off *Baiomys musculus nigrescens*, Tuxtla, Mexico p. 426 fig.; *P. scitula* sp. nov. larva off *Liomys pictus isthmicus*, Rio San Gregorio, Mexico p. 427 fig.; gen. redescribed p. 421; key to species p. 428, Brennan & Jones.

Pseudotarsonemoides ectoplogasteris ♀ p. 802 fig., key to ♀♀ p. 747, Schaarschmidt.

Pseuduropoda obscura ♀. N.L. p. 265 figs., Hirschmann & Zirngiebel-Nicol (2).

Psorergates kerivoulae sp. nov. ♀. ♂ off *Kerivoula cuprosa* (Mamm.), Bokuma, Belgian Congo p. 61 figs. also off *K. harrisoni bellula*: *P. laviae* sp. nov. ♀ off *Lavia frons* (Mamm.), river Akanyaru, Ruanda-Urundi p. 64 figs.; *P. nycteris* sp. nov. ♀ off *Nycterus* sp., Musha, Ruanda-Urundi p. 56 figs.; *P. rhinolophi* sp. nov. ♀ off *Rhinolophus clivosus zuluensis* and *R. hildebrandti*, Lubudi, Belgian Congo p. 59 figs. also off *R. aethiops*, Fain (7); *P. (Psorergatoides) subgen. nov.* type *kerivoulae* Fain 1959 p. 233; *P. (P.) emballonurae* sp. nov. ♂. ♀ off *Emballonura nigriscens* (Mamm.), Id. of Bougainville, New Guinea p. 241 figs.; *P. (P.) hipposideros* sp. nov. ♂

off *Hipposideros abae*, Bunia, Belgian Congo p. 237; *P. (P.) lonchorhinae* sp. nov. ♂. ♀ off *Lonchorhina aurita* (Mamm.) and *Saccopteryx canina* (Mamm.), San Esteban, Venezuela p. 243 figs.; *P. (P.) rhinolophi* comb. nov. p. 235 figs.; key to species in subgen. p. 246, Fain (10).

Psorergatoides subgen. nov. see *Psorergates* p. 232, Fain (10).

Psorobia gen. nov. Psorergatidae p. 55; type species *Psorergates ovis* Womersley 1941 p. 66, Fain (7).

Psoropoides cryptonychus sp. nov. ♂. ♀ off *Corythaeola cristata*, Ambam, South Cameroons p. 181 fig.; *P. haplonychus* sp. nov. ♂. ♀ of *Tockus fasciatus*, Ambam and Meiganga, Cameroons p. 182 figs.; *P. uroplax* sp. nov. ♂ off *Tockus fasciatus*, Cameroons also off *Bycanistes albotibialis* and *B. sharpei* p. 183 fig., Gaud & Mouchet.

Pteralloptes elythrurus ♂ p. 196 fig., Gaud & Mouchet.

Pterocolorus gen. nov. Pterolichidae p. 496; type species not designated, Gaud & Mouchet (1); *P. gen. nov.* Pterolichidae: Vexillariinae p. 667; type species *Pterolichus pterocolorus* Trouessart p. 668 fig.; *P. aphyllus* sp. nov. ♂ off *Ceratogymna atrata* (Bucerotidae), Ambam, Cameroons, also off *Bycanistes albotibialis* p. 669 fig., Gaud & Mouchet (2).

Pterodectes turdinus sp. nov. ♂. ♀ off *Turdus rufiventris rufiventris*, Mangaratiba, Brazil p. 11 figs.; *P. gracilis* ♂ p. 9 fig., Berla (1).

Pterolichus (*Pseudalloptes*) *akidoderma* sp. nov. ♂. ♀ off *Guttera edouardi sclateri*, (Phasianidae), Obala, Cameroons p. 641 figs.; *P. (P.) alloptoides* sp. nov. ♂. ♀ off *Guttera plumifera* (Phasianidae), Ambam, Cameroons p. 645 figs.; *P. (P.) anacanthus* sp. nov. ♂. ♀ off *Guttera edouardi sclateri* (Phasianidae), Bertoua and Obala, Cameroons p. 647 fig.; *P. (P.) cyrtocercus* sp. nov. ♂. off *Guttera edouardi sclateri* (Phasianidae), Bertoua, Cameroons p. 649 fig.; *P. (P.) diploderma* sp. nov. ♂. ♀ off *Numida meleagris* (Phasianidae), Yaoundé and Tibati, Cameroons p. 650 figs.; *P. (P.) goniodurus* sp. nov. ♂. ♀ off *Guttera plumifera*, Ambam, Cameroons p. 652 figs.; *P. (P.) hyalosoma* sp. nov. ♂. ♀ off *Francolinus bicalcaratus* (Phasianidae), Yaoundé and Agagedo, Cameroons p. 652 figs.; *P. (P.) microthyrus* sp. nov. ♂. ♀ off *Numida meleagris*, Yaoundé and Tibati, Cameroons p. 653 figs.; *P. (P.) pachydorus* sp. nov. ♂. ♀ off *Phasidus niger*, Ambam, Cameroons p. 654 figs.; *P. (Pterolichus) colesoma* sp. nov. ♂. ♀ off *Guttera plumifera*, Ambam, Cameroons p. 655 figs.; *P. (a. str.) euryzonus* sp. nov. ♂. ♀ off *Guttera edouardi sclateri*, Yaoundé Cameroons p. 657 figs.; *P. (a. str.) francolinus lathami*, Yaoundé, Cameroons p. 658 figs.; *P. (s. str.) francolinus lathami*, Yaoundé, Cameroons p. 659 figs.; *P. (s. str.) glyptothyrus* sp. nov. ♂. ♀ off *Corythaeola cristata* (Musophagidae), Ambam, Cameroons p. 659 figs.; *P. (s. str.) hyalostictus* sp. nov. ♂. ♀ off *Francolinus squamatus*, Yaoundé, Cameroons p. 661 figs., Gaud & Mouchet (2); *P. varians selenurus* ♂. ♀ p. 204 figs., Berla (2).

Pteronyssoides garioi sp. nov. ♂. ♀ off *A nthreptes frazeri cameronensis* (Nectariniidae), Yaoundé, Cameroons p. 508 figs.; *P. holopla* sp. nov. ♂. ♀ off *Pycnonotus barbatus gabonensis* (Pycnonotidae), Yaoundé, Cameroons also off *Pyrrhurus simplex* and off *P. flavicollis flavigula* p. 150 figs.; *P. lambda* sp. nov. ♂. ♀ off *Amblyospiza albifrons saturata* (Ploceidae), Yaoundé, Cameroons p. 511 figs.; *P. multipla* sp. nov. ♀ off *Campether a permista* (Picidae), Yaoundé, Cameroons p. 513 fig., Gaud & Mouchet (1).

Pteronyssus allourus sp. nov. ♂. ♀ off *Gymnobucco bonapartei* (Capitonidae), Yaoundé, Cameroons p. 514 figs.; *P. diplopla* sp. nov. ♂. ♀ off *Turdoidea plebeja* (Timaliidae), Yaoundé, Cameroons p. 516 figs.; *P.*

doleoplax sp. nov. ♂ ♀ off *Theselocichla leucopleura* (Pyronotidae), Ambam, Cameroons p. 517 figs.; *P. josephi* sp. nov. ♂ ♀ off *Pedilorrhynchus comitatus* (Muscicapidae), Yaoundé, Cameroons p. 519 figs.; *P. megalothyrus* sp. nov. ♂ ♀ off *Bleda eximia notata* (Pyronotidae), Yaoundé, Cameroons p. 521 figs.; *P. microplax* sp. nov. ♂ ♀ off *Dendropicos fuscescens camerunensis* (Picidae), Yaoundé, Cameroons p. 522 figs.; *P. neuronotus* sp. nov. ♂ ♀ off *Jynx ruficollis* (Picidae), Yaoundé, Cameroons p. 523 figs.; *P. oxyplax* sp. nov. ♂ ♀ off *Terpsiphone viridis* (Muscicapidae), Yaoundé, Cameroons p. 524 figs.; *P. pycnospilus* sp. nov. ♂ ♀ off *Campetheria permista* (Picidae), Yaoundé, Cameroons p. 525 figs., Gaud & Mouchet (1).

Pterophagoides gen. nov. Dermoglyphidae p. 464; type species *P. bathmourus* sp. nov. ♂ ♀ off *Calopelia puerula* (Columbiforme), Ambam, Cameroons p. 464 figs., Gaud & Mouchet (1).

Pterophagus brachysoma sp. nov. ♂ ♀ off *Streptopelia semitorquata* (Columbiforme), South Cameroons p. 466 figs.; *P. monacrotrichus* sp. nov. ♂ ♀ off *Turtur afer* (Columbiforme), Yaoundé, Cameroons p. 467 figs.; *P. similis* sp. nov. ♂ ♀ off *Turtur afer* (Columbiforme), Yaoundé, Cameroons p. 470 figs.; *P. africanus* ♂ ♀ p. 467 figs., Gaud & Mouchet (1).

Pterygosa rubicundum sp. nov. ♂ ♀ off *Agama armata armata*, Mt. Gorongosa, Portuguese East Africa p. 569 fig.; *P. (G.) gerrhosauri* ♂ described p. 571 fig., Lawrence (7).

Ptilonysus cisticolarum sp. nov. ♀ off *Cisticola fulvipennis*, Rustenburg, Transvaal p. 26 figs.; *P. estrildicola* sp. nov. ♀ off *Lagonosticta rhodopareia*, Astrida, Ruanda-Urundi, also from other Estrildinae p. 22 figs.; *P. fringillicola* sp. nov. ♀ off *Poliopisitta strigolata kivuensis*, Rugege Forest, Ruanda-Urundi p. 28 figs.; *P. tillae* sp. nov. off *Laemorphornis mevesii*, Newtoning, Transvaal p. 25 figs.; key to species of "sairae" group p. 30, Fain (17); *P. madagascariensis* sp. nov. ♀ in nasal cavities of *Izocinchla madagascariensis*, Tananarive, Madagascar p. 383 fig., Grettillat et al. (2).

Punctoribatus (?) *perlongus* sp. nov. Felsomarác, West Hungary p. 29 figs., Balogh (2).

Pusilloponia subgen. nov. for *Piona pusilla* (Neum. 1875) p. 22, Besseling.

Pyemotes anobii sp. nov. ♀ ♂ off *Anobium punctatum*, off *Calandra granaria* and off *C. oryzae*, Germany p. 444 figs.; *P. aradii* sp. nov. ♀ off *Aradus depressus*, France p. 441 fig.; *P. beckeri* sp. nov. ♀ ♂ off *Anobium punctatum*, off *Calandra granaria* and off *C. oryzae*, Germany p. 451 fig.; *P. schweidtigeri* sp. nov. ♀ ♂ off *Buprestidae*, Guatemala p. 437; *P. herfsi* ♀ ♂ p. 446 figs.; *P. scolyti* ♀ ♂ p. 433 figs., Krezal; *P. boylei* sp. nov. ♀ ♂ off *Cryptotermes brevis* and off larva of *Araecerus levipennis*, Honolulu, Hawaii p. 150 figs., Krezal (1).

Pygmephorus amplus p. 525 fig.; *P. angustus* p. 505 fig.; *P. antiquissimus* p. 469 fig.; *P. arboris* p. 528 fig.; *P. arvorum* p. 517 fig.; *P. bavaricus* p. 523 fig.; *P. blumentrittii* p. 533 fig.; *P. ceratophyi* p. 492 fig.; *P. chaetus* p. 491 fig.; *P. cultratus* p. 485 fig.; *P. ellipticus* p. 530 fig.; *P. erlangensis* p. 474 fig.; *P. forcipatus* p. 476 fig.; *P. gracilis* p. 519 fig.; *P. haarloevi* p. 509 fig.; *P. ignotus* p. 527 fig.; *P. islandicus* p. 478 fig.; *P. kochi* p. 501 fig.; *P. lithobii* p. 537 fig.; *P. mesembrinae* p. 498 fig.; *P. microti* p. 483 fig.; *P. morrissi* p. 531 fig.; *P. obovatus* p. 544 fig.; *P. primitivus* p. 464 figs.; *P. priscus* p. 466 fig.; *P. sellnicki* p. 512 fig.; *P. setosus* p. 489 fig.; *P. silvestris* p. 507 fig.; *P. soricis* p. 479 fig.; *P. spinosus* p. 470 fig.; *P. stammeri* p. 481 fig.; *P. succiculus* p. 503 fig.; *P. tarsalis* p. 521 fig.; *P. togatus* p. 511 fig.; *P. ursulae*

p. 495 fig.; *P. willmanni* p. 515 fig.; *P. pratensis* p. 535 fig.; *P. comatus* p. 540 fig.; *P. decumanus* p. 542 fig.; *P. mattheisi* p. 542 fig.: The following species although indicated as n. sp. were published in key form in Krezal 1958, Z.R. 95 1958. *P. amplus*, *P. angustus*, *P. arboris*, *P. bavaricus*, *P. blumentrittii*, *P. ceratophyi*, *P. chaetus*, *P. comatus*, *P. decumanus*, *P. ellipticus*, *P. erlangensis*, *P. ignotus*, *P. kochi*, *P. mattheisi*, *P. microti*, *P. pratensis*, *P. primitivus*, *P. priscus*, *P. soricis*, *P. stammeri*, *P. ursulae*, Krezal.

Pygmodisipus (P.) *equestris* p. 665 fig., Karafiat.

Radfordia leminia, larva and nymph, p. 86 figs., Konno; *R. minuta* nymph, p. 53 fig., Benoit (1).

Raillietia auris ♀ ♂ p. 276 figs., Alwar et al.

Raphignathus tessellatus Ewing 1909 = *Leidermuelleria clavata* (Can. & Fanz. 1876) p. 85, Summers.

Rhagidia gineti sp. nov. Grotte de la Buire, Jura, France p. 23 figs.; *R. diversicolor* p. 17 fig.; *R. longipes* p. 18 figs.; *R. mordax grandis* p. 19 fig.; *R. pratensis* p. 20 fig.; *R. reflexa* p. 22 fig.; *R. spelaea* p. 21 fig.; *R. strasseri* p. 22 fig.; *R. terricola* p. 26 figs., Cooreman (3).

Rhinodex gen. nov. Demodicidae p. 264; type species *R. baeri* sp. nov. ♀ N. off *Galago senegalensis moholi* (Mamm.), Bugesera, Ruanda-Urundi p. 264 figs., Fain (11).

Rhinonyssus sphenisci sp. nov. ♀ ♂ in nasal cavities of *Spheniscus humboldti*, [Aves] zoo at Antwerp, origin Peru p. 13 figs.; *R. afribyz* ♂ p. 14 fig., Fain & Mortelmann (24); *R. himantopus*, new records p. 134 figs.; key to species p. 133, Strandmann.

Rhipicephalus camelopardalis sp. nov. ♂ ♀ *Giraffa camelopardalis tippelskirchi*, W. Masai, Kenya p. 448 figs., Walker & Wiley; *R. (Pomerantzevia subgen. nov.)* type species *R. sculpturatus* sp. nov. ♂ ♀, host?, Khasi Hills, Assam p. 1 figs., Dias, J. A. T. S. (2); *R. (R.) compositus* ♂ ♀ p. 47 figs.; *R. (R.) confusus* ♂ ♀ p. 86 figs.; *R. (R.) lunulatus* ♂ ♀ p. 59 figs.; *R. (R.) muhleni* ♂ ♀ p. 82 figs.; *R. (R.) pravus* ♂ p. 78 figs.; *R. (R.) sanguineus* ♂ ♀ p. 23 figs.; *R. (R.) senegalensis* ♂ ♀ p. 37 figs.; *R. (R.) simus* ♂ ♀ p. 32 figs.; *R. (R.) serranoi* ♂ ♀ p. 84 figs.; *R. (R.) sulcatus* ♂ ♀ p. 74 figs.; *R. (R.) tricuspidis* ♂ ♀ p. 53 figs.; *R. (R.) ziemanni* ♂ p. 50 figs., Tendeiro; *R. mühleni* ♂ ♀ N. L. host list and distribution p. 125 figs., Salisbury.

Rhipiurus gen. nov. Dermoglyphidae p. 470; type species *Eustathia polyphyllodes*, Gaud p. 470; *R. copephorus* sp. nov. ♂ ♀ off *Vinago calva* (Columbiforme), Yaoundé, Cameroons p. 471 figs., Gaud & Mouchet (1).

Rhodacarellus epignathis perspicuus subsp. nov. ♀ Stranice, Czechoslovakia p. 98 figs., Halašková.

Rhodacaroides gen. nov. Rhodacaridae p. 97; type species *R. aegyptiacus* sp. nov. ♂ ♀ Al Ghardaqa, Egypt p. 98 figs., Willmann.

Rhombognathus magnirostris ♀ redescribed p. 130 figs.; *R. plumifer* comb. nov. ♀ p. 135 figs.; *R. lonyx* comb. nov. ♀ p. 141 figs., Newell & André; *R. pascens* ♂ p. 95 fig., André, M. (3).

Rhynophytopus rubifoliae sp. nov. ♀ off *Quercus rubra* Virginia Beech, Virginia p. 656 Keifer.

Rhysotritia gen. nov. Euphthiracarini p. 342; type species *Euphthiracarus ardua* C. L. Koch 1836 p. 342 fig.; *R. duplicita limbata* subsp. nov. Holstein, Germany p. 338 fig., Markel & Meyer (2).

Rodhainyssus yunkeri subsp. *longipilis* subsp. nov. in nasal cavities of *Molossus abrasus* [Mamm.], Dutch Guinea p. 6; *R. yunkeri* ♀ p. 4 fig., Fain (14).

Roquella (*Hexaroquella* subgen. nov.) *longimaxillaris* sp. nov. ♂ Rio Arapiuns, Amazons p. 150 figs., Viets, K.

Sarcopites pitheci sp. nov. ♀ off *Cercopithecus aethiops sabaeus* and *Papio papio papio* in captivity p. 597 figs., Phillippe.

Scheloribates discifer sp. nov. Cavuumba River, Angola p. 100 figs.; *S. discrepans* sp. nov. Cavuumba, Angola p. 100 figs.; *S. leleupi* sp. nov. Kasai, Belgian Congo p. 100 figs.; *S. ornatus* sp. nov. Kasai, Belgian Congo p. 100 figs., Balog (3); *S. tubuaiensis* sp. nov. ♀ Rurutu, Polynesia p. 135 fig., Sellnick (3).

Schizocarpus mingaudi ♂ N. p. 111 fig., Lawrence.

Schizolaelaps gen. nov. Laelaptidae p. 136; type species *Laelaps mazzai* Fonseca ♂ 1939 p. 137 figs., Fonseca (2).

Schöngastia (*S.*) *basilewskyi* sp. nov. larva off *Lissotis melanogaster*, Kamembe, Ruanda Urundi p. 632 figs.; *S. (S. dartevellei)* sp. nov. larva off *Turdoidea leucopygia*, Kamaniola, Belgian Congo p. 642 figs.; *S. (S. howdai* sp. nov. larva off *Cercopithecus mitis*, Zanzibar and off *C. aethiops*, Pemba, Uganda p. 647 fig.; *S. (S. gigantica* sp. nov. larva off rodents, Lubero, Belgian Congo p. 640 figs.; *S. (S. katangae* sp. nov. larva off *Paraxerus cepapi* quatuor, Elisabethville, Belgian Congo p. 638 fig.; *S. (S. lucasii* sp. nov. larva off *Rattus r. frugivorus*, Coquilhatville, Equatorial Africa p. 646 figs.; *S. (S. olbrechtsi* sp. nov. larva off *Centropus superciliosus*, Bukavu, Belgian Congo p. 637 figs.; *S. (S. potamogale* sp. nov. larva off *Potamogale velox*, Bokuma, Belgian Congo p. 635 fig.; *S. (S. rara* sp. nov. larva off *Galago crassicaudatus agizymbanus*, Pemba, Uganda p. 638 figs.; *S. (S. rubi* sp. nov. larva off *Agama atricollis* and off *Mabuya maculilabris*, Bokavu, Belgian Congo p. 643 figs.; *S. (S. rubi* *avis* subsp. nov. larva off *Centropus superciliosus* and off *Turdoidea leucopygia*, Bokavu, Belgian Congo p. 645 fig.; *S. (S. rubi* *roentzi* subsp. nov. larva off *Oenomyia hypoxanthus*; off *Arvicathis abyssinicus* and off *Pelomys fallax*, Bokavu, Belgian Congo p. 645 fig.; *S. (S. howdai* *zanzii* subsp. nov. larva off *Galago crassicaudatus agizymbanus*, Zanzibar, also off *Petrodromus s. sultana* p. 649 fig.; *S. (S. lucasii* *sciuri* subsp. nov. larva off *Heliosciurus rufobrachium*, Shabunda, Belgian Congo p. 647; *S. (S. oubanguiensis* *bicalcar* subsp. nov. larva off mammals and birds, Belgian Congo p. 653 fig.; *S. (S. radfordi* *nottei* subsp. nov. larva off *Centropus grilli*, Luvungi, Belgian Congo p. 635 figs.; *S. (Endotrombicula)* *rana* sp. nov. larva off *Rana fusigula*, Blukwa, Belgian Congo p. 667 figs.; *S. (E.) barrosi* sp. nov. larva off *Rana fusigula* *angolensis*, Alto Chicapa, Angola p. 666 figs.; *S. (S. andrei* p. 656 fig.; *S. (S. cercopithecus* p. 655 fig.; *S. (S. gerhosauri* p. 659 fig.; *S. (S. haddowi* p. 650 fig.; *S. (S. haddowi* *hyracis* p. 652 fig.; *S. (S. lavoipierrei* p. 636 fig.; *S. (S. mabuyana* p. 658 fig.; *S. (S. monticola* p. 658 fig.; *S. (S. oubanguiensis* p. 653 fig.; *S. (S. platyouri* p. 659 fig.; *S. (S. pseudocordyli* p. 659 fig.; *S. (S. radfordi* p. 634 fig.; *S. (S. scincicola* p. 659 fig.; *S. (P.) fitzsimonsi* p. 665 fig.; *Vercammen-Grandjean* (1); *S. galachrysis* sp. nov. larva off *Galachrysis nuchalis nuchalis*, M'Balmayo, Cameroons p. 239 figs., Taufflieb & Mouchet (1); *S. longisetosa* p. 22 fig., Hirsgaard.

Schizotetranychus (s. str.) *beckeri* ♀ p. 388 fig.; *S. (s. str.) halimodendri* ♀ 389 fig., Wainstein (1).

Schwiebea barbei sp. nov. Grotte de l'Eglise, Hautes-Pyrénées, France p. 34 figs., Cooreman (3).

Scopusacarus gen. nov. Pterolichidae p. 663; type species *Pseudalloptes pyriventris* Trouessart 1886 p. 663, Gaud & Mouchet (2).

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(A.) gracilis* comb. nov. p. 95 figs.; *T. (A.) graminis* comb. nov. p. 89 figs.; *T. (A.) hexagonus* comb. nov. p. 103; *T. (A.) largoensis* comb. nov. p. 96 figs.; *T. (A.) leuophaphaeus* comb. nov. p. 99 figs.; *T. (A.) limonicus* comb. nov. p. 96 figs.; *T. (A.) magnanalis* comb. nov. p. 105; *T. (A.) meridionalis* comb. nov. p. 85 figs.; *T. (A.) mexicanus* comb. nov. p. 92 figs.; *T. (A.) oregonensis* comb. nov. p. 91 figs.; *T. (A.) ovatus* comb. nov. p. 90 figs.; *T. (A.) potentillae* comb. nov. p. 93 figs.; *T. (A.) rademacheri* comb. nov. p. 89 figs.; *T. (A.) septus* comb. nov. p. 92 figs.; *T. (A.) setulos* comb. nov. p. 105; *T. (A.) setulos* comb. nov. p. 70 figs.; *T. (A.) setosulus* comb. nov. p. 103; *T. (A.) sectus* comb. nov. p. 66 figs.; *T. (A.) tropicus* comb. nov. p. 91 figs.; *T. (A.) tsugawai* comb. nov. p. 91; *T. aberrans* p. 101 figs.; *T. aceri* p. 65 figs.; *T. aequipilus* p. 83 figs.; *T. africanus* p. 96 figs.; *T. alveolaris* p. 52 figs.; *T. anchialus* p. 51 figs.; *T. andersoni* p. 92 figs.; *T. arboreus* p. 52 figs.; *T. asiaticus* p. 80 figs.; *T. australicus* p. 66 figs.; *T. bakeri* p. 63 figs.; *T. bakeri* p. 61 figs.; *T. bellinus* p. 75 figs.; *T. brevipinus* p. 78 figs.; *T. caudatus* p. 86 figs.; *T. conspicuus* p. 55 figs.; *T. cornutus* p. 55 figs.; *T. cucumeris* p. 78 figs.; *T. contiguus* p. 50 figs.; *T. desertus* p. 76 figs.; *T. fallacis* p. 74 figs.; *T. finlandicus* p. 67 figs.; *T. flumensis* p. 57 figs.; *T. foenalis* p. 90 figs.; *T. fraterculus* p. 60 figs.; *T. grandis* p. 102 figs.; *T. harlandrovi* p. 60 figs.; *T. heveae* p. 101 figs.; *T. irregularis* p. 70 figs.; *T. japonicus* p. 80 figs.; *T. longilaterus* p. 79 figs.; *T. longipinatus* p. 74 figs.; *T. longulus* p. 86 figs.; *T. marinus* p. 79 figs.; *T. maseei* p. 75 figs.; *T. mesembrinus* p. 72 figs.; *T. morganii* p. 85 figs.; *T. neobitti* p. 65 figs.; *T. newsumi* p. 96 figs.; *T. obtusus* p. 90 figs.; *T. occidentalis* p. 59 figs.; *T. okanagensis* p. 93 figs.; *T. ornatus* p. 75 figs.; *T. ovalis* p. 68 figs.; *T. paspalivorus* p. 79 figs.; *T. peregrinus* p. 97 figs.; *T. perlongistus* p. 84 figs.; *T. pini* p. 53 figs.; *T. pomii* p. 56 figs.; *T. pyri* p. 64 figs.; *T. recki* p. 62 figs.; *T. reticulatus* p. 76 figs.; *T. rhenanus* p. 62 figs.; *T. scoticus* p. 76 figs.; *T. similis* p. 93 figs.; *T. singularis* p. 61 figs.; *T. smithi* p. 49 figs.; *T. soleiger* p. 59 figs.; *T. tiliarum* p. 65 figs.; *T. transvaalensis* p. 60 figs.; *T. umbriticus* p. 75 figs.; *T. validus* p. 56 figs.; *T. victoriensis* p. 68 figs.; *T. zweifeli* p. 78 figs.; keys to groups and species of groups p. 49, Chant; *T. 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No record.

KUSTARACHNIDA

No record.

HAPTOPODA

No record.

TRIGONOTARBI

No record.

ACARINA

No record.

PHALANGIOTARBI

No record.

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Nettorhynchus sp. from *Eidolon helvum* (Mamm.), Bamako, Sudan p. 519 figs., **Dollfus**.

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Faunal lists.—Luxemburg, Remy & Hoffmann (3).

AFRAPAUROPIDAE fam. nov. p. 1020, Remy.

Afrauropus gen. nov. Afrauropidae p. 1018; type species *A. occiduus* sp. nov. ♂ Camp du Gouan, Guinea p. 1018 figs., Remy.

Allopauropus (Decapauropus) egregius sp. nov. ♂ Ziela, Guinea p. 1013 fig.; *A. (D.) moreauxi* sp. nov. ♀ Ziela, Guinea p. 1011 fig., Remy; *A. (Decapauropus) jasperensis* sp. nov. ♀ Jasper, Arkansas p. 189 figs., Remy (2).

Millotauropus frustatorius sp. nov. Ziela, Guinea p. 1009 fig., Remy.

Polypauropus lamottei sp. nov. ♀ Monts Nimba, Guinea p. 1015 figs., Remy.

Pauropus speciosus sp. nov. ♀ Cathedral Peak, Natal p. 259 figs., Remy (1).

Stylopaurooides delamarei ♂ p. 1011 figs., Remy.

Stylopauropus (Donzelotauropus) schusteri sp. nov. ♂, ♀ Jasper, Arkansas p. 183 figs., Remy (2).

ONYCHOPHORA

List of type specimens in Zoological Mus. Hamburg, Weidner.

Peripatus ouropretanus sp. nov. Ouro Preto, Minas Gerais, Brazil p. 1, Trindade.

ERRATA

Z.R. 83 1946: 7 No. 131 for Colman read Coleman.

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